Review Articles

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Rehabilitation Literature is intended for use by professional personnel and students in all disciplines concerned with rehabilitation of the handicapped. It is dedicated to the advancement of knowledge and skills and to the encouragement of cooperative efforts by professional members of the rehabilitation team. Goals are to promote communication among workers and to alert each to the literature on development and progress both in his own area of responsibility and in related areas.

As a reviewing and abstracting journal, *Rehabilitation Literature* identifies and describes current books, pamphlets, and periodical articles pertaining to the care, welfare, education, and employment of handicapped children and adults. The selection of publications listed and their contents as reported is for record and reference only and does not constitute an endorsement or advocacy of use by the National Society for Crippled Children and Adults.

The National Society for Crippled Children and Adults does not stock for sale publications indexed in *Rehabilitation Literature*. List prices and addresses of publishers are given for information only. Copies should be obtained directly from the publisher or through local bookstores. Known addresses of authors of periodical articles follow their names.

Books for review and correspondence relating to feature articles and other editorial matters should be addressed to the editor. He will welcome your suggestions.

REHABILITATION LITERATURE

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May, 1959, Volume 20, No. 5

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National and International Meetings

1959

May

American Association on Mental Deficiency, May 19-23. Hotel Schroeder, Milwaukee. Dr. Neil A. Dayton, Secretary-Treasurer, Mansfield State Training School, Mansfield Depot, Conn.

Inter-American Conference on Rehabilitation (Fourth), May 20-23. San Juan, Puerto Rico. Sponsored by the International Society for the Welfare of Cripples. Inquiries and registration should be sent to Dr. Herman Flax, Professional Building, Suite 301, Santurce 34, Puerto Rico.

National Conference on Social Welfare. 86th Annual Forum, May 24-29. San Francisco. Headquarters hotels: Sir Francis Drake, Whitcomb, and Sheraton-Palace. Mr. Ralph Price, Asst. Exec. Secretary and Annual Forum Manager, 22 W. Gay St., Columbus 15, Ohio.

National Tuberculosis Association, May 24-29. Palmer House, Chicago. Mrs. Wallace B. White, Secretary, 1790 Broadway, New York 19, N.Y.

June

American Diabetes Association, June 6-7. Chalfonte-Haddon Hall, Atlantic City. Dr. Paul Sheridan, Secretary, 1 E. 45th St., New York 17, N.Y.

American Geriatrics Society, June 4-5. Hotel Traymore, Atlantic City. Dr. Richard J. Kraemer, Secretary, 2907 Post Road, Warwick, R. I.

American Hearing Society. 40th Annual Convention, June 9-12. Fountainbleau Hotel, Miami Beach. Mr. Crayton Walker, Exec. Director, 919 18th St., N.W., Washington, D.C.

American Instructors of the Deaf. Annual convention, June 28-July 3. Colorado Springs, Colo. Sister Rose Gertrude, Secretary, St. Mary's School, 2253 Main St., Buffalo, N.Y.

American Medical Association, June 8-12. Hotel Traymore, Atlantic City. Dr. F. J. L. Blasingame, Secretary, 535 N. Dearborn St., Chicago 10, Ill.

American Medical Women's Association, June 4-7. Sheraton Ritz Carlton Hotel, Atlantic City. Miss Lillian T. Majally, Exec. Secretary, 1790 Broadway, New York 19, N.Y.

American Neurological Association, June 15-17. Claridge Hotel, Atlantic City. Dr. Charles Rupp, Secretary, 133 S. 36th St., Philadelphia 4, Pa.

American Orthopedic Association, June 16-18. Lake Placid Club, Lake Placid, N.Y. Dr. Lee Ramsey Straub, Secretary, 535 E. 70th St., New York 21, N.Y.

American Physical Therapy Association. 36th Annual Convention, June 21-26. Hotel Leamington, Minneapolis. Miss Annetta Cornell Wood, Exec. Director, 1790 Broadway, New York 19, N.Y.

American Rheumatism Association, June 2-6. Mayflower Hotel, Washington, D.C. Dr. Edward F. Hartung, Secretary, 580 Park Ave., New York 21, N.Y.

International Catholic Child Bureau. VIIth Congress, June 29-July 5. Lisbon, Portugal. For further information, write to the Secretary-General, Internatl. Catholic Child Bureau, 31 rue de Fleurus, Paris 6e, France.

Medical Library Association, June 15-19. King Edward-Sheraton Hotel, Toronto, Canada. Miss Nettie Mehne, Secretary, The Upjohn Co., Kalamazoo, Mich.

Mediterranean Conference on Rehabilitation (First), June 9-13. Athens, Greece. Sponsored by the International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y.

National Education Association. Annual convention, June 28-July 3. St. Louis. Mr. William G. Carr, Exec. Secretary, 1201 16th St., N.W., Washington 6, D.C.

Second Pan-American Congress on Rheumatic Diseases (in conjunction with the 23rd Annual Meeting of the American Rheumatism Association), June 2-6. Clinical Center, Bethesda, Md., and Hotel Mayflower, Washington, D.C. Gerald W. Speyer, Exec. Director, Am. Rheumatism Assn., Rm. 1700, 10 Columbus Circle, New York 19, N.Y.

July

First International Medical Conference on Mental Retardation, July 27-31. Eastland Hotel, Portland, Me. Registration forms and reservation blanks may be obtained from Dr. Ella Langer, Chairman, Arrangements Comm., Maine State Dept. of Health and Welfare, Augusta, Me.

International Congress of Paediatrics, July 19-25. Montreal, Canada. Dr. R. L. Denton, 2300 Tupper St., Montreal 25, Que., Canada.

World Council for the Welfare of the Blind. General Assembly, July 22-31. Rome, Italy.

August

American Congress of Physical Medicine and Rehabilitation. 37th Annual Session, August 30-September 4. Hotel Leamington, Minneapolis. Miss Dorothea C. Augustin, Exec. Secretary, 30 N. Michigan Ave., Chicago 2, Ill.

American Hospital Association. Annual Convention, August 24-27. Coliseum, New York City. Convention headquarters, Statler Hotel. Dr. Edwin L. Crosby, Secretary, 18 E. Division St., Chicago, Ill.

International Congress for Speech and Voice Therapy, August 17-22. London, England. Miss M. Carter, Secretary, 46 Canonbury Sq., London, N. 1, England.

World Federation for Mental Health, August 30-September 5. Barcelona, Spain. Miss Esther M. Thornton, Secretary-General, 19 Manchester St., London, W. 1, England.

September

American Psychological Association, September 3-9. Cincinnati. For information, write to: Roderick H. Bare, c/o American Psychological Assn., 1333 16th St., N.W., Washington 6, D.C.

World Congress for Physical Therapy, September 6-12. Paris, France. Miss M. J. Neilson, Tavistock House, Tavistock Sq., London, W. C. 1, England.

World Medical Association, September 7-12. Montreal, Canada. Dr. Louis H. Bauer, Secretary-General, 10 Columbus Circle, New York 19, N.Y.

October

American Academy of Ophthalmology and Otolaryngology, October 11-16. Palmer House, Chicago. Dr. William L. Benedict, Exec. Secretary, 15 Second St., S.W., Rochester, Minn.

American Academy of Pediatrics, October 3-8. Palmer House, Chicago. Dr. E. H. Christopherson, Exec. Secretary, 1801 Hinman Ave., Evanston, Ill.

American Heart Association, October 23-27. Trade and Convention Center, Philadelphia. Mr. William F. McGlone, Secretary, 44 E. 23rd St., New York 10, N.Y.

American Occupational Therapy Association, October 16-23. Morrison Hotel, Chicago. Miss Marjorie Fish, Exec. Director, 250 W. 57th St., New York 19, N.Y.

American Public Health Association, October 19-23. Convention Hall, Atlantic City. Dr. Berwyn F. Mattison, Exec. Director, 1790 Broadway, New York 19, N.Y.

American School Health Association, October 18-23. Atlantic City. Dr. A. O. De Weese, Secretary, 515 E. Main St., Kent, Ohio.

National Rehabilitation Association, October 26-28. Statler Hotel, Boston. Mr. E. B. Whitten, Exec. Director, 1025 Vermont Ave., Washington 5, D.C.

Orthopedic Appliance and Limb Manufacturers Association. National Assembly, October 18-21. Adolphus Hotel, Dallas. For information, write: Orthopedic Appliance and Limb Manufacturers Assn., 411 Associations Bldg., Washington 6, D.C.

November

Gerontological Society, November 12-14. Statler Hotel, Detroit. Mrs. Marjorie Adler, Admin. Secretary, 660 S. Kingshighway Blvd., St. Louis 10, Mo.

REHABILITATION LITERATURE

Review of the Month

Rehabilitation Medicine

By Howard A. Rusk, M. D., and 36 Collaborators with the Editorial Assistance of Eugene J. Taylor, A. M.

Published by the C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, Mo. 1958. 572 p. illus. $12.00.

Reviewed by Gustave Gingras, M.D.

About the Author . . .

This book is a result of the collaboration with Dr. Rusk of 36 of his colleagues in the Department of Physical Medicine and Rehabilitation, New York University—Bellevue Medical Center. Neither Dr. Rusk nor his editorial associate Eugene Taylor need further introduction to the readers of Rehabilitation Literature.

About the Reviewer . . .

Dr. Gingras has been Executive Director of the Rehabilitation Institute of Montreal since its founding in 1949. As Expert on Rehabilitation, he was sent by the U.N. Technical Assistance Administration on several missions to Venezuela, where he organized the first pilot rehabilitation center in that country. For a period of five years he was a member of the WHO Expert Advisory Panel on Rehabilitation.

Rehabilitation Medicine is the latest educational publication of Dr. Howard A. Rusk and his collaborators. It contains extensive information springing from a vast amount of experience and knowledge and comes as an answer to the pressing need for unifying the modern concept of rehabilitation into a compact, comprehensive form so necessary to the successful prosecution of any rehabilitation service. It is a broad synthesis that will serve all rehabilitation devotees, medical, paramedical, and allied workers. It reads smoothly. There is a human quality that breathes from the pages, which will give it a long life and make it a basic reference textbook. *Rehabilitation Medicine,* by promoting the attitude of treating the patient, not the disability, deserves a special place within rehabilitation literature, for it cannot be overemphasized that the philosophy governing both training and treatment must be integrated into a continuous process that can adjust to the individuality of all patients, thus eliminating any remote possibility of production-line treatment. This book is the concrete result of predictions made many years ago by Charles H. Mayo when he stated, "The keynote of progress in the 20th century is system and organization, in other words, 'teamwork.'" It was foreseen in 1925 by Dr. William J. Mayo that "Rehabilitation is to be a master word." As stated in the preface, "medical rehabilitation is a dynamic concept and action program. Here the skills of the rehabilitation team, consisting of the physicians, physical therapists, occupational therapists, nurses, social workers, counselors, and other trained personnel are integrated as a single force to assist the patient in reaching the maximum of his physical, emotional, social, and vocational potentials." This underlying rehabilitation concept, as stated in the preface, is consistently developed throughout the book.

Rehabilitation Medicine meets the latest requirements of presentation

and layout. It is easy to consult as a reference and is abundantly illustrated and enhanced by excellent photographs, charts, and illustrations. This book is filled with a vast amount of information organized so that it can be readily understood by the professions directly concerned with rehabilitation. It also is an excellent source of information for medical administrators or even laymen associated with rehabilitation programs.

The first portion of the book examines the principles of rehabilitation medicine, namely therapeutic exercises and muscle re-education, occupational therapy, teaching of activities of daily living, rehabilitation nursing, the use of braces, crutches, and wheel chairs, orthotics, training of the disabled homemaker, the management of psychiatric, speech, social, and vocational problems, and prescription writing. A special chapter is devoted to the problems pertaining to evaluation. Part II deals in detail with the specialized application of these principles to patients with metabolic diseases, musculoskeletal problems, diseases of the muscular and neuromuscular systems, neurologic disorders, cerebral palsy, poliomyelitis, cancer, paraplegia or quadriplegia, pneumopathies, cardiovascular disease, problems of children, and geriatrics. The case method is used in many sections and an extremely well-documented literature supports the various considerations.

Most important, special emphasis is placed, through detailed discussions, on topics on which there is little available information. Partial goals such as muscle retraining, employment, compensation for handicap, and social adjustment have given way to a total approach to the full expression of the assets of the rehabilitee.

Rehabilitation Medicine is a must for the medical profession and all students of medicine and the paramedical professions as a means of acquaintance with basic principles, procedures, and results in rehabilitation. It is equally recommended as a methodical compilation and assessment of experiences that might help rehabilitation students and teachers alike to acquire an over-all picture of the various facets of rehabilitation and to adapt their mental processes to teamwork in a progressive fashion. In view of the topics discussed and the rich variety of model charts and forms, this book will be helpful to any group planning rehabilitation facilities in any part of the world. This information is useful whether plans call for the organization of a department attached to a hospital or a separate unit.

The book is worthy of international recognition in the education of rehabilitation personnel and is a valuable addition to the reference library of organizations directly or indirectly connected with rehabilitation.

Other Books Reviewed

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A Concise Textbook of Anatomy and Physiology Applied for Orthopaedic Nurses

By: **Joyce W. Rowe** and **Victor H. Wheble**

1959. 684 p. figs., tabs. Published by E. & S. Livingstone, Ltd., Edinburgh, Scotland, and available in the United States from Williams & Wilkins Co., 428 E. Preston St., Baltimore 2, Md. $8.00.

Because examinations for the orthopedic nursing certificate in England demand a greater knowledge of anatomy and physiology than is found in texts intended for the general nursing student, the authors have included in addition to the accepted basic information more detailed discussions of muscle attachments to bone, the structure and function of joints, the physiology of muscular tissue, the group action of skeletal muscles, and the course and distribution of peripheral nerves. Simple, concise descriptions are used, avoiding confusing technical terms wherever possible. Illustrations are used extensively to clarify descriptions. References to orthopedic application of anatomical and physiological principles are given briefly. Postural and mechanical factors involved in everyday activities are described, as well. The book should be of interest to other ancillary personnel working in medical services.

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The Handicapped; A Challenge to the Non-Handicapped

By: **Adolph A. Apton, M.D.**

1959. 124 p. Citadel Press, 222 Fourth Ave., New York 3, N.Y. $3.00.

The physical and psychological burdens imposed by physical handicaps are well understood by the author, a distinguished plastic surgeon. Especially for those persons whose handicaps are not amenable to correction or removal by plastic or general surgery, Dr. Apton makes a plea for sympathetic understanding and acceptance by the public. He advocates a program in which physicians and educators would cooperate in rehabilitation efforts. As he sees it, the public attitude toward the handicapped needs "rehabilitating." Tracing the history of family and community attitudes toward the handicapped from primitive times to the present day, he sees some hope for the improvement of human relations in this sphere. Amply illustrated with case history material and with examples from biographical literature, he shows how the handicapped have overcome their physical limitations in spite of adverse public attitudes. He especially urges that handicapped children be educated in the normal classroom rather than in special schools. The author has been widely

recognized as a pioneer in research on the psychological aspects and problems in plastic surgery.

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Long Shadows

By: **George Warburton Sizer** and **Vera Brittain**

1958. 222 p. A. Brown and Sons, Ltd., 32 Brooke St., London, E.C. 1, England. 12s 6d, plus 10d for postage (approx. $2.43).

In this story of an imaginary Yorkshire family and the effects of war and physical disability on its various members, the author vividly portrays the physical and psychological consequences of injury and permanent handicaps. Largely autobiographical (the author, wounded in World War I, had lost a leg while in his early twenties), the story tells of repeated injury in the second generation; the son of the main character is badly burned in a plane crash, consequently losing his right arm and the sight of one eye. Vera Brittain, well known as the author of *Testament of Youth,* has added a final chapter interpreting the meaning of physical handicaps, the horrors of war, and the community's responsibility toward the disabled. Without sentimentalizing the issue, she makes the point that no amount of rehabilitation and the provision of pensions can ever compensate for loss of limbs or sight.

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Looking Up

By: **Jane Boyle Needham** (as told to Rosemary Taylor)

1959. 191 p. G. P. Putnam's Sons, 210 Madison Ave., New York 16, N.Y. $3.50.

Completely paralyzed from the neck down for the past nine years, the author nevertheless persuaded doctors at the County Hospital that she should be allowed to go home to be with her three small children whose custody she managed to gain when her husband divorced her after her illness. Although her life is limited by her handicap, she has found great happiness and compensations. Rosemary Taylor, who collaborated with Mrs. Needham in the writing of the book, is the author of *Chicken Every Sunday.* Lively and entertaining, the book contains many humorous situations and characters to delight the reader.

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Never Say Die; A Return to Everyday Living for the Partly Disabled

By: **Anthony Richardson**

1959. 107 p. illus. Max Parrish and Co., Ltd., 55 Queen Anne St., London, W. 1, England. 12s 6d.

After hospitalization, a stay in a convalescent home, and physical therapy treatments for a stroke that left him partly paralyzed in the left leg and arm, the author returned to his former lodgings determined to overcome the annoying problems of daily living that a stroke poses. He describes for the benefit of those similarly disabled the practical solutions he has worked out for himself in caring for his personal needs and getting about independently. He approaches his subject in a half-humorous way, advising of the pitfalls to be avoided in dressing, bathing, shaving, and eating, as well as walking indoors and out.

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The Onset of Stuttering; Research Findings and Implications

By: **Wendell Johnson** (and associates)

1959. 243 p. tabs. University of Minnesota Press, Minneapolis 14, Minn. $5.00.

This detailed report is of research conducted at the University of Iowa from 1934 to 1957; the three related investigations were undertaken to determine, if possible, in what form, at what age, and under what conditions the problem of stuttering arose in the child. A study of about 500 children and their parents was made; parents were interviewed on the beginnings of the problem and related physical, emotional, medical, socioeconomic, and educational aspects occurring in family life and development of the child. Comparisons are drawn between parents of stutterers and a control group of parents of nonstuttering children on the basis of responses to interview questions and scores on the Minnesota Multiphasic Personality Inventory. Major conclusions drawn from the research point to the crucial interactions of speaker and listener (child and parent) and their role in the development of stuttering. Dr. Johnson and his associates believe that children regarded as stutterers are essentially normal physically and emotionally and that the problem in most cases can be arrested or eliminated with treatment in early childhood, particularly when parental counseling is provided. Dr. Johnson, long regarded as an authority in the fields of speech pathology and psychology, has through his research findings added a significant contribution to the literature on stuttering.

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Physiotherapy in Obstetrics and Gynaecology (Including Education for Childbirth)

By: **Helen Heardman**; revised by Maria Ebner

1959. 244 p. figs., tabs. 2d ed. Published by E. & S. Livingstone, Ltd., Edinburgh, Scotland, and available in the United States from Williams & Wilkins Co., 428 E. Preston St., Baltimore 2, Md. $5.00.

Proponents of "natural childbirth" will be interested in this revised edition describing the role of physical therapists in antenatal and postnatal care. Physiotherapists in Great Britain have been given the responsibility of edu-

Forthcoming

In the June issue of *Rehabilitation Literature,* the Article of the Month will be "Problems of Sensorimotor Learning in the Evaluation and Treatment of the Adult Hemiplegic Patient," by Glenn G. Reynolds, M.D., with the collaboration of Signe Brunnstrom, R.P.T.

In the July issue *Rehabilitation Literature* will publish as its Article of the Month "More Effective Rehabilitation Through Rehabilitation Center and State Vocational Rehabilitation Agency Cooperation," by Willis C. Gorthy and Nathan M. Slater.

cating women for childbirth, possibly, it is suggested, because no other member of the obstetric team has yet found time to undertake the task. Several brief chapters are devoted to the anatomy, physiology, and psychology of reproduction; the remainder of the book describes methods of class instruction for the pregnant woman, with detailed descriptions of exercises for the development of muscle and breath control to promote relaxation. Mental hygiene instruction is also described. Chapters are included on postnatal exercises, contraindications for exercise during pregnancy because of complications, the use of exercise to overcome abnormal conditions occurring before and after birth, and drugs used during labor. Statistics from a study of 800 women who were trained for childbirth according to the methods described here are given in an attempt to evaluate the worth of such training. Physical therapy for gynecologic conditions is discussed more briefly. A glossary and index add to the usefulness of the book.

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Rehabilitation Centers Today; A Report on the Operations of 77 Centers in the United States and Canada

By: **Henry Redkey**

1959. 231 p. illus., tabs., charts. *(Rehab. Serv. ser. no. 490)* Published by the U.S. Office of Vocational Rehabilitation and available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C. $1.00.

Originally begun as a revision of *Rehabilitation Centers in the United States,* published in 1953 by the National Society for Crippled Children and Adults, this book has been expanded to include a general view of rehabilitation centers by types, their costs and staffing needs, based on data received from 77 centers. A separate chapter discusses centers for the blind, which, because of the highly specialized nature of their work, differ in their programs. For those planning new facilities or improvements in existing centers, the book will aid in identification of the type center that will fill community needs, the variety of services possible, and the administrative problems. Part II gives detailed reports on 65 general rehabilitation centers, covering independent centers with and without beds and centers located in hospitals. Part III lists individual centers by state, describing their programs, caseloads, staffing, services offered, disabilities served, training affiliations, research activities, and future plans. (For a digest of Chapter 7, see #360.)

New Books to Be Reviewed

The new books listed below, because of their significance, are to be reviewed critically by well-known authorities in forthcoming issues of *Rehabilitation Literature.* The book reviews will be featured in the "Review of the Month" section.

Davies, Stanley Powell, with the collaboration of **Katherine E. Ecob**

The mentally retarded in society. 1959. 248 p. tabs. Columbia University Press, 2960 Broadway, New York 27, N.Y. $5.50.

Martmer, Edgar E., ed.

The child with a handicap; a team approach to his care and guidance. 1959. 409 p. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill. $11.00.

Meyer, Henry J., and **Edgar F. Borgatta**

An experiment in mental patient rehabilitation; evaluating a social agency program. 1959. 114 p. illus. Russell Sage Foundation, 505 Park Ave., New York 22, N.Y. $2.50.

Salmon, F. Cuthbert, and **Christine F. Salmon**

Rehabilitation center planning, an architectural guide. 1959. 192 p. illus., charts, plans. Pennsylvania State University Press, 310 Old Main, University Park, Penn. $12.50.

Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.

359

Building Camp Facilities for the Handicapped

By: **W. B. Schoenbohm** and **Lawrence Hovik**

In: *Recreation.* March, 1959. 52:3:94-96

Interest is growing in camping for the physically handicapped. It has been effectively demonstrated that camp experience provides a valuable complement to a medical rehabilitation program. In the relaxed, informal atmosphere of a camp, handicapped persons often make phenomenal progress in physical development and improve in their attitude toward disability. More and more states are developing new camp facilities. One state that has built such a camp is Minnesota; there the Society for Crippled Children and Adults recently completed Camp Courage.

Problems and the Architect.—Developing a camp for physically disabled children is an architectural problem requiring design of maximum normality yet suited to special needs. Compromises with accepted camping philosophy, technic, and procedure should be made only when imperative because of campers' handicaps. The architect must integrate in his plan the special physical, recreation, and therapeutic requirements of a camp for physically handicapped children. The scheme should, nevertheless, appear natural, simple, and direct and provide a very close concentration of units without appearing cluttered or confining.

Site selection.—Before detailed planning, a thorough study should be made of what constitutes a proper site for a special camp. The architect should help in this, for his experience and skill can be used effectively in exploiting to the maximum the site's potentials. All too frequently architectural planning has had to conform to an inadequate site. Criteria should be established in advance so the site may be chosen on the basis of plan rather than pressure. For the Camp Courage site it was required that:

It be located on a good spring-fed lake.
It have plenty of sandy beach area.
The beach have a gradual slope.
The lake should not "green" in early fall.
It be within 50 miles of the Twin Cities for medical, administrative, and transportation reasons.
It contain 25 acres or more of ground.
The ground not slope too abruptly.
The area be wooded and have bird and wildlife.
It be fairly isolated and away from places such as resorts, taverns, nightclubs, and main thoroughfares.

About 70 sites in various parts of Minnesota were surveyed. A 40-acre site on Cedar Lake, between Annandale and Maple Lake, was selected. All criteria save one was met—it was more uneven than desired. However, this did not present too big a problem because of modern earth-moving equipment, and many interesting aspects of the property offset its limitations. Ample all-round protection from encroachment was provided by 3,800 feet of shoreline. Another area was considered where it would have been necessary to build a swimming pool. A pool has one advantage over a lake—water temperature can be regulated, allowing maximum use. Location on a lake made possible numerous other activities, such as boating, canoeing, fishing, nature study, and sailing.

Determining the Program.—The camp program must be decided on at the same time as the initial architectural planning. A detailed outline should be set up to aid and guide decisions regarding location, site selection, building function requirements, financing, construction, programing, and schedules of use by campers. It is almost mandatory to put the planned program of operation in writing. The report should include everything from the philosophy of camping for the specific group to detailed day-by-day operating schedules expressed in narrative text, statistics, diagrams, drawings, and photographs. Minimum standards, evaluations, and carefully studied conclusions should be included. This is essential to give the architect proper orientation and direction for planning. If, in the course of the program, one must deviate from the established principles or planning, changes need not be made piecemeal but can be considered within the framework of the whole program.

It is important to establish initially the type of camp to be planned—whether primarily recreational, therapeutic, or a combination. Many questions must be answered, such as:

What type of group, or groups will be served—physically handicapped or combination of types?
Approximately how many may be in wheelchairs per period, if any?
How many may be ambulatory in varying degrees?
What are the special conditions (crutches, canes, braces, walkers)?

What are the age limits and age-group distributions?
Will blind children be admitted? If so, how many per period?

Other questions can be answered: How many campers per period? How many staff members, counselors, housekeeping help, and so on are required? What are the maximum housing and feeding requirements per camping period?

The need in the area to be served is the major quantitative guide, since the capacity of the camp must, if possible, be adequate for the estimated number of qualified applicants. Near large metropolitan urban areas, the need evidently will always exceed the facilities possible. It is suggested that such special camps not exceed a capacity of 100 children. It was concluded that a big part of the state's need would be filled by a facility providing for 450 to 500 campers each summer, with additional special weekend outings for parents and other handicapped groups. The camp was planned to care for 96 youngsters per period, each of the 6 cottages housing 16 campers and 4 counselors. The camp thus has a maximum capacity of 480 per season of 5 two-week sessions.

Architectural Considerations.—First a topographical survey of the terrain should be made so the problems of drainage, sewage disposal, runoff, and so on can be properly handled. Next comes an over-all layout of the buildings planned for the initial camp program and those for future needs. Mobility and traffic flow can be assessed in advance. Since children and adults with all types of handicaps, including the visually handicapped and the blind, were to be admitted, the Minnesota camp was planned without steps and unnecessary barriers and hazards. The cottages, built in the form of a Maltese cross, were grouped around the dining, recreation, health-and-therapy, nature, and arts-and-crafts buildings. Cottages include two sections for eight campers each, a counselor section, and inside toilet facilities. Campers' quarters are subdivided into units of four by half-way partitions for privacy and grouping according to interests. Entrances are ramped and doorways are 42 inches wide to accommodate wheelchairs and walkers.

Additional features are the easily operated low, sliding windows, which offer a view of the lake even from wheelchairs, and high-vaulted roofs to give an air of freedom and expansion as well as improved ventilation. There are special wheel-in showers, low lavatories and mirrors, and grip bars in showers and around toilets. The dining hall-recreation center is in the middle of the camp, on two levels, taking advantage of the contour of the land and easily accessible from cottage and beach areas; the recreation center is on the lower or beach level, the dining hall on the cottage level. An inside ramp with a 10-degree slope provides easy access, especially beneficial on rainy days. The dining hall, which has a capacity of 160 persons, has a giant fireplace on the north wall and much glass on the other sides. The recreation area contains space for leisure-time games, movies, and programs. Game areas include Ping-pong, shuffleboard (table and floor), billiards, and corners for quiet, relaxing games. Immediately in front of the building and to the left of the lower area, is the nature building, octagonal with a blue flexiglass skylight. This houses the aquarium and various collections and specimens. An arts-and-crafts building, hexagonal and two-leveled, is in back of the dining hall and built into a hillside. The professional staff has quarters on the second floor, which also opens to the ground level. Adequate quarters (three cottages) for key staff and their families were built overlooking the camp. These increase the chances of obtaining the quality and continuity of leadership so essential to the program. A separate health-and-therapy building was erected, with space for physical, speech, and occupational therapy, nurse's quarters, doctor's examining room, and two four-bed sick bays. The final unit is an outdoor amphitheater in a natural birch bowl at the north end of the building area. It is open on two sides and has a plate-glass back so a view of the lake may be had from all directions. This amphitheater is symbolic of the courage and strength that handicapped children derive from attendance at Camp Courage—and the assistance sound architectural planning gives in achieving the aims and objectives of a camping program for the handicapped.

Recreation is published by the National Recreation Association, 8 W. Eighth St., New York 11, N.Y., subscription rate $4.00 a year, 50c a copy (Canadian and foreign rate $4.50 a year).

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Chapter 7: Number and Type of Patients Served

By: **Henry Redkey**, Secretary, Conference of Rehabilitation Centers

In: *Rehabilitation Centers Today; A Report on the Operations of 77 Centers in the United States and Canada, p. 59-69.* 1959. 231 p. illus., tabs., charts. *(Rehab. Serv. ser. no. 490)* U.S. Office of Vocational Rehabilitation, Washington, D.C. Available from Supt. of Documents, U.S. Govt. Printing Office, Washington 25, D.C. $1.00.

In collecting information for this study, reliable figures on the numbers of patients have been most elusive. The trouble lies, not in unwillingness to furnish information, but in the nature of rehabilitation center operations, the very great diversity in programs, and, in many smaller centers, lack of adequate record systems.

Turnover and Intensity of Services

Centers having beds sometimes serve only inpatients and give concentrated and integrated daily service. Outpatients are apt to receive much less intensive service from the centers than do inpatients. In communities where physical medicine is underdeveloped or there is intensive rivalry

among hospitals' medical staffs, centers sometimes function as a community pool of skills and services and are affiliated with no one hospital. They tend to provide large numbers of patients with small amounts of service, usually of a physical or occupational therapy nature. Measurement of such service in relation to that of full-time patients presents a problem.

A center working with severely involved patients may serve relatively few but very intensively. Another with limited facilities may give many a minimum rehabilitation service. Program emphasis also makes a difference. A large vocationally oriented center or one with a well-developed sheltered-shop program will keep patients for months. But a medically oriented center concentrating mainly on physical restoration can, where possible, make most severely disabled patients ambulatory or on self-care status in 60 to 90 days. It is difficult to count patients and costs of such centers in the same column.

Number Served

Measures of caseload are not very meaningful because of wide variations in turnover, scope of program, and intensity of services. A substantial number is served in the United States—53,247 in one year by 62 centers reporting annual caseload. Of the total, 37,906 (71.2%) were outpatients, many probably receiving limited but valuable service, 14,412 (27.1%) were inpatients, presumably receiving intensive service, while 929 (1.7%) received home service. Measure of intensity of home service is not adequate; there is a trend toward more of it. Of all those served, 8,537 (17%) were under the age of 16 years and thus ineligible for vocational rehabilitation in most states. Of these, 6,701 were inpatients.

The distribution of the patients in 61 centers on a typical day in October, 1956, showed the largest number, 2,842, receiving medical services. An independent count was requested for each department but duplication between departments was assumed. Vocational services, excluding sheltered employment, were received by the second largest number, 898; there were 643 in sheltered shops. Combined, the total receiving vocational services would be 1,541, about half those receiving medical services. The number seen in a typical month shows the same general distribution as on a typical day. When figures in the daily and monthly report are compared in the medical, psychological, social, vocational, and sheltered-shop services, significant differences appear. If in each service the monthly figure is divided by the daily figure, the following index of activity by departments is obtained: medical, 4.9; psychological, 7.8; social, 5.3; vocational, 2.5; and sheltered shop, 2.1. In the psychological service, 7.8 times as many people are seen in a month as in a day, indicating less service per person than in sheltered shops, where only 2.1 times as many are seen in a month. The lowest index is in vocational and sheltered shops, indicating that in these departments patients tend to remain for longer periods for continuous service, while patients in medical and psychological services tend to be treated over shorter periods. This seems to document the observation that rehabilitation services of a medical nature are for relatively short terms when compared with vocational services.

Disability Groups Served

Several factors affect the composition of the caseload in any particular center. Some centers have been established to serve a particular group, such as the cerebral palsied; others serve patients with orthopedic or neurological conditions, seldom admitting cardiacs, the tuberculous, or epileptics. Five centers did not report on this. In view of the widespread speculation on numbers and kinds of disabilities served, particularly among planners of new centers, it is helpful to examine numbers in different categories served by existing centers. The largest single category was disabilities of bones, joints, and muscles, which accounted for 14,710 (31%) of all patients served in the 60 centers answering this question. In 29 (48%) these cases accounted for one-fourth or more of the caseload. Three centers reported no patients in this category. Prenatal brain damage accounted for only 2,673 (6%), and postnatal brain damage, more prevalent in an aging population, 5,558 (12%). Those with poliomyelitis accounted for only 3,011 (6%) and amputees, 4,204 (9%). Only 7 percent had "low-back" disabilities, while 2 percent were tuberculous and 4 percent cardiac patients. Paraplegics numbered 2,210 (5%).

Referrals to Centers

The number of persons who might benefit by service in a rehabilitation center differs from those actually referred. Some of the factors that cause fewer to be referred are: 1. Not all those needing service are known. 2. Rehabilitation centers must be paid and a sponsor is not always available. 3. The center may be far from the patient's home, making him unwilling to accept treatment there. 4. Other services may be available in the community and, if not as comprehensive as desired, may nevertheless contribute to rehabilitation. 5. The scope and intensity of services available in a center may not enable it to serve the patient effectively. 6. Rivalries among physicians or agencies may operate to reduce referrals to a particular center. 7. Budgets of purchasing agencies may be, and often are, below the costs of service. 8. The center may not have effective communication with referral sources.

Private physicians made 16,924 (35%) of the 47,985 referrals to 61 centers. These referrals may be related to whether or not the center has a medical director. The 10 centers having no medical director (chief of medical services) reported 3,876 referrals from doctors, or 45 percent of all referrals received by them. All 10 are outpatient centers and presumably to some extent furnish only

physical medicine on prescription. Of the 16,924 referrals from physicians, 9,159 (54%) were to outpatient centers and 7,765 (46%) to inpatient centers. Six centers reported no referrals from physicians. Forty-two of the 61 centers reported that more than one-fourth of their caseload was referred by physicians. Twelve (29%) of the 42 can be classed as independent centers with beds, 23 (55%) independent centers without beds, and 7 (17%) hospital centers. Insurance companies made 7,729 (16%) of the 47,985 referrals. State vocational rehabilitation agencies referred 5,964 (12%). Sixteen centers reported vocational rehabilitation referrals amounted to one-fourth or more of all referrals; 10 centers (16.7%) received none from vocational rehabilitation (3 independent centers with beds, 5 without, and 2 hospital centers). Seven of the 10 had no prevocational unit, 5 reported no vocational counseling personnel, 9 no sheltered-shop personnel, and 8 no vocational training personnel. Of the 10, 9 had medical directors. Three state-operated centers and 1 voluntary center with heavy vocational orientation, including 3 offering vocational training, accounted for 2,430 (40.7%) of all referrals received from the vocational rehabilitation agencies.

If there were a comparable report for 1952, a very considerable increase in referrals from vocational rehabilitation would probably have been shown in the five-year period. State and federal appropriations for the vocational rehabilitation program increased from $29 million in 1950 to $67 million in 1957, suggesting that vocational rehabilitation is becoming an increasingly important source of referrals.

Many people have advocated more use of centers by welfare departments to rehabilitate persons now receiving public assistance. Welfare departments referred 2,832, 6 percent of all those referred to 61 centers. Hospitals referred 3,484 (7%). Analysis shows that 30 percent of all those referred by hospitals were referred to hospital centers. Eight hundred seventy (25%) of referrals from hospitals were to independent centers with beds and 1,539 (44%) were to independent centers without beds. Five centers (two hospital centers, one independent center with beds, and two independent centers without beds) reported that one-fourth or more of all their referrals came from hospitals. Only 1,608 (3%) of referrals came from other voluntary agencies, and only one center reported that more than one-fourth of its referrals came from this source.

Waiting Lists

It is sometimes thought that, because the need is presumably much greater than centers available, all must have long waiting lists. Reports from 60 centers indicated that this is only partially true. Forty-one (68%) had waiting lists; 32 percent did not. Those having lists reported 1,127 waiting, an average of 27 per reporting center. The average length of wait is 11 days.

(For a description of the complete report, of which this is but one chapter, see #358, this issue of Rehab. Lit.)

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Phenaglycodol Therapy in Cerebral Palsy

By: **I. Newton Kugelmass**

In: *Annals N.Y. Acad. Sci.*, p. 283-290. Oct. 15, 1958. 72:8:271-292.

Our 1956 demonstration of the effectiveness of the phenaglycodol analogue, meprobamate, in the symptomatic management of organic mental syndromes in the spheres of thought, feeling, and action and of its superiority over other psychochemotherapeutic agents in mentally retarded children, led us to investigate the usefulness of phenaglycodol in cerebral palsy. Our present study is on the effect of phenaglycodol (Ultran) on all clinical aspects of cerebral palsy.

Twenty infants and 24 children, aged 1 to 18 years, receiving individualized therapy for various types of cerebral palsy (*see* table) were given phenaglycodol to determine its over-all effect as well as that on the child's neuro-

Percentage Distribution of Developmental Deviations in Cerebral Palsy, 44 Cases

Type	Developmental Retardation	Mental Retardation	Visuomotor Defect	Visual Defect
Spastic	85	60	30	25
Athetoid	75	50	5	12

Type	Hearing Defect	Speech Defect	Emotional Disturbance	Behavior Disturbance	Convulsive Disorder
Spastic	5	50	90	85	35
Athetoid	20	90	80	70	15

muscular disorder. Age groups or palsy types could not be used in pairing for controls, for each type of cerebral palsy is a highly individual problem. Control studies were done by alternating like periods of therapy with the drug and of use of a placebo. The dosage of phenaglycodol ranged from 300 to 3,000 mg. daily in divided doses after meals and at bedtime. Some children showed a desired response to 100 mg. within 30 minutes for a period of 5 hours; others required 3 to 6 times as much before any effect was discernible within 120 minutes. Initial hesitancy about giving high doses led to unwarranted deductions on ineffectiveness of the drug. A gradual development of adaptation and tolerance in some children made it even harder to establish the maintenance dose than to set the primary therapeutic dose. Girls required smaller doses than boys for the same pharmacological effects and sensitive children one-fourth to one-half the general effective

dose. The optimal dose was usually attained within two weeks and maintained for a month or two to quantitate motor, emotional, educational, and social progress in each type of palsy.

Since active cooperation depends largely on intellectual capacity, intelligence ratings were determined. Half the group had mild palsies and were given the Stanford-Binet Form L and Cattell Infant Intelligence tests. One-third, with moderate palsies, were given the modified Stanford-Binet test and the Columbia Mental Maturity test adapted to the individual. One-fifth, with severe palsies, were not amenable to testing. The IQ for about 20 percent was less than 40, for 45 percent between 40 and 70, for 30 percent between 70 and 100, and for 5 percent over 100. Spastics and athetoids did not differ appreciably in IQ although 30 percent of the former and only 5 percent of the latter showed visuomotor disturbances.

The series was made up entirely of spastic and athetoid groups, with a rare case of rigidity, ataxia, or tremor. With the spastic group, the spastic muscle improved in 35 percent of the cases, the stretch reflex in 35 percent, emotional stress in 30 percent, and hyperactivity in 25 percent. Spastic children responded to phenaglycodol therapy in specific aspects, clearly shown by periodic comparative studies. Restraint of volitional attempts improved somewhat in 8 children, and the violent reaction to sudden loud noises lessened in 14. In most, muscle stiffening diminished somewhat; deep tendon reflexes showed some loss of hyperactivity in 12 children. Muscle clonus was marked in eight after quick stretch. Overflow movements lessened substantially in 18 children, reflected in fewer manifestations of facial contortions, compression of the lips, and production of guttural sounds and in increased respiration or hyperextension of the legs. Spastic children showed greater cooperation and improved response to physical therapy during phenaglycodol therapy than during the control period. Apprehension was lessened in all children. Balance improved in 18, standing posture in 12, weight transference in 10, and correct falling in 8.

The athetoid group showed greater responsiveness to adjuvant phenaglycodol therapy than the spastic group. Muscle tension improved in 50 percent, emotional expression in 40 percent, muscle coordination in 30 percent, body movements in 25 percent, and postural control in 20 percent. Athetoid children improved markedly in neuromuscular disturbances; overflow movements were diminished in 18 children, irregular movements in 8, fatuous facial expressions in 12, abnormal posturing in 8, and stiffening spells in 2. There was an over-all decrease in involuntary motion without alteration of voluntary motion. However, no change was observed in four children with the calm type of athetosis. Athetoids responded far better to the physical therapy regimen while receiving phenaglycodol than during the control period. In the younger group better range of motion and habit pattern training were obtained than in the older. Body relaxation in the sitting and lying positions improved in most. Head balance improved in 14, trunk control in 10, sitting balance in 10, and finger painting in 4; all improved in both form and function for longer periods.

Physical training programs originally were difficult with spastics and athetoids with relatively normal or somewhat subnormal mentality caused not by basic incapacity to learn or cooperate, but by the disabling effect of intense emotionality, continuous fear, and unsuccessful effort. In the athetoids far more than in the spastics, adjuvant phenaglycodol therapy alleviated the emotionality and fear, but not incapacity or inefficiency. Actual fears were not relieved, but their intensity and resulting paralysis of action were alleviated with use of phenaglycodol. The body frame of most athetoids, tremulous at intervals with nervous agitation, settled in repose throughout the day's guided activities. The increased calm was not an end in itself, but helped the athetoid to better coordination of motor skills.

Feelings revealed by personality studies of both groups were more of anxiety and frustration than conflict and hostility, the accumulated emotional tension dissipating into disturbed motor activity. Marked emotional maladjustment to their disabilities was caused by ambivalent attitudes toward themselves and poor relationships with their families, consisting of conflicting attitudes toward them. Educational programs designed to bring about more harmonious relationships between the palsied child and his family were more effective during therapy than during the control period. Persistent emotional disorders in the older palsy patient required psychotherapy.

During therapy with phenaglycodol, both groups of palsied children, especially the athetoids, improved in performance of daily routine activities—cooperating in feeding and drinking, dressing and undressing, bladder and bowel training, and reverted to variable extents when a placebo was used. Nutritional improvement was definite and correlated with greater relaxation and longer sleep periods in 30 percent of the palsied children, compared with inappreciable changes in the nutritional status during the control periods. Feeding difficulties were somewhat relieved. Sucking improved in 12 children, chewing in 8, and swallowing in 8; there was less choking in 6, less gagging in 2, and vomiting cleared completely in 8. Speech disorders, in about 80 percent of the children, were relieved only to a very minor degree by phenaglycodol therapy—breathing discoordination improved slightly in 8 children, chewing in 6, sucking in 6, swallowing in 6, and stuttering in 1. Parents were more impressed by the positive changes in emotional behavior and motor function than were the therapists.

Phenaglycodol showed a wide margin of safety. Side-effects or significant complications were few on any dosage and were more evident to the examiner than to the child. Physical side-effects were more noticeable than emotional complications. The drug was found safe for prolonged therapy. It was well tolerated, relatively nontoxic, and nonproductive of blood dyscrasia. The children were given complete physical and mental examinations at periodic intervals, and medical surveillance for physical and mental symptoms was complete during drug therapy.

Gastrointestinal disorders occurred in 3 cases (7%); reactions, mild but well defined, were mouth burning, nausea, abdominal pain, or transient diarrhea. Adverse cerebral effects occurred in 9 percent. Emotional disorders developed in two cases, manifested by excitement or depression in a younger child and headache and irritability in an older child. Prolonged excitation and increased anxiety occurred in one child receiving doses of from 1,500 to 3,000 mg. per day. Locomotor difficulties with dizziness developed in one child who received 1,000 mg. per day for four months. In one cerebral palsied child with petit mal receiving maintenance doses of 1,000 mg. of meprobamate per day, parkinsonism developed within 48 hours, probably due to overstimulation of the extrapyramidal system. Muscular rigidity, manifested by cogwheel phenomenon, slowing of movement, loss of associated movements, and festinating gait, reversed with discontinuance of the drug. Allergic responses developed in 8 percent. Two children of allergic constitution and two with no personal or family history of allergy showed cutaneous manifestations with local erythema, intense itching, macular urticaria, angioedema, and allergic purpura. Arthralgia occurred in one of the two children with angioedema, localizing in the knees and ankles. Allergic purpura appeared in one who had had eczema in infancy. The tourniquet test was positive, but bleeding time and platelet counts were normal, indicating vascular injury.

Clinical toxicity of phenaglycodol was slight, since a palsied child 11 years of age ingested 8 gm. with no untoward effect beside excessive drowsiness for the afternoon. Hyperactive palsied children requiring maximal dosages of 3 gm. per day for desirable effects showed persistent hypertension.

School Health Services for Handicapped Children

"COMMUNITY HEALTH AND EDUCATION services for children with a variety of physical, mental and emotional handicaps have multiplied rapidly in recent years. Joint planning and cooperative relationships between health, education, and other appropriate authorities facilitate the establishment and operation of adequate programs for handicapped children.

"Case-finding programs to identify children in need of special health or educational services may be conducted in schools as well as in the community at large. The pre-school census is a fruitful source of information for locating handicapped children who have not been identified previously. School screening and appraisal programs likewise uncover cases where special measures are needed.

"In diagnosis, treatment and rehabilitation of children with crippling conditions, it is the joint responsibility of private medicine, dentistry, the allied health professions and public agencies to assist the family. Health departments should be actively involved in development of programs and provision of services for this group.

"Children with handicaps should be absorbed into the school program provided for 'normal' children insofar as the child can profit from experiences in a regular school situation and the presence of the child in the regular classroom will not require excessive individual attention from the classroom teacher. Special auxiliary services such as lip-reading or speech instruction may be necessary on a concurrent basis. Recommendations relative to the health safeguards and adjustment necessary for certain children should be made by medical authorities. The health department can often assist the school in obtaining such advice.

"Severely handicapped children who cannot be absorbed into the regular school classroom and who can profit from educational experiences should be assigned to special classes or special schools where possible. Homebound children should have instruction opportunities provided by teachers in these special classes or schools. The school is responsible for operating these education services. Health departments may assist by providing advice, consultation and health supervision by resource personnel and by mobilizing other community resources to aid the program. Special health rehabilitative or maintenance services may be made available to children in special schools or classes."—*From* Responsibilities of State Departments of Education and Health for School Health Services, *rev. ed., Jan., 1959, p. 30-31, Council of Chief State School Officers, 1201 16th St., N.W., Washington 6, D.C. 35c a copy; 10-99 copies, 25c; 100 or more, 20c.*

Abstracts of Current Literature

This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book Rehabilitation Literature 1950-1955, *compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.*

AMPUTATION—FICTION

See 353.

AMPUTATION—MENTAL HYGIENE

362. Haber, William B. *(275 Central Park West, Apt. 9A, New York 24, N.Y.)*

Reactions to loss of limb; physiological and psychological aspects. *Annals N.Y. Acad. Sci.* Sept. 30, 1958. 74:1:14-24.

In order to fully understand the individual reactions to amputation, Dr. Haber strongly urges that study of amputees be approached from both the physiological and psychological viewpoints. Research he has undertaken is concerned with sensory changes in the stump, the appearance of phantom sensations, and the psychological aspects of loss of limb. Data from a study of 24 male veterans (World War II) with unilateral above-elbow amputations are presented. Stump sensitivity exceeded that of the sound limb for light touch, two-point discrimination, and point localization. Findings would seem to indicate that reorganization of function and tactile discrimination depend on central nervous system factors. Evidence also points to central rather than peripheral factors in the origin of phantom limb sensation. No significant relationship was found between the wearing of an artificial limb and the dimensions, quality, or vividness of the phantom sensations. Other test findings suggest that personality differences enter into the choice and use of prosthetic devices.

AMPUTATION—OCCUPATIONAL THERAPY

363. Richardson, Geraldine *(526 Prospect Ave. S.E., Grand Rapids, Mich.)*

Upper extremity prosthetic training for the young amputee, by Geraldine Richardson and Aida Lund. *Am. J. Occupational Ther.* Mar.-Apr., 1959. 13:2 (Part I) :57-63.

A description of training technics used with satisfactory results over a period of four years with young amputees (age two to four years) in the Area Amputee Program of the Michigan Crippled Children Commission. Technics for building up prosthetic tolerance and for training both above-elbow and below-elbow amputees are described in detail, as well as those applicable in training children with shoulder disarticulation or bilateral amputation. Illustrations and sample forms (check-list for prosthetic training and for recording performance) are included. The difficulty in setting up a timetable for training is stressed but an "ideal" timetable for a below-elbow amputee is presented with suggestions for training where the training period is of limited duration.

AMPUTATION—PHYSICAL THERAPY

364. Cicenia, Erbert F. *(N.Y. State Rehabilitation Hosp., West Haverstraw, N.Y.)*

Functional training of the bilateral above-knee amputee, by Erbert F. Cicenia (and others). *Am. J. Phys. Med.* Feb., 1959. 38:1:9-23.

Special Review.

Functional training of the amputee, consisting of instruction in the use of the prosthesis and ambulation training, follows the same fundamental pattern as functional training to use braces and crutches. Proper evaluation is followed by general conditioning, pre-prosthetic stump exercises, and training in fundamentals prior to actual instruction in functional activities. Exercises and activities described for use in functional training are representative of any number that might be developed for the bilateral above-knee amputee. Article is illustrated.

ARCHITECTURE

See 400.

ARTHRITIS—PHYSICAL THERAPY

365. Bolton, Elizabeth

Hand exercises for rheumatoid arthritis. *Rehabilitation.* Jan.-Mar., 1959. 28:16-18.

An illustrated article describing a series of hand exercises intended to overcome stiffness in the wrist and fingers, weakness of the muscles that part the fingers, immobility of finger joints, and the tendency for fingers to swing away from the thumb. Caution is urged in performing the exercises within the limit of pain.

366. Hamilton, D. E.

A controlled trial of various forms of physiotherapy in arthritis, by D. E. Hamilton, E. G. L. Bywaters, and N. W. Please. *Brit. Med. J.* Feb. 28, 1959. 5121:542-544.

Reports an experimental trial to study outpatient treatment of persons with either rheumatoid arthritis involving the hands or knees or degenerative joint disease involving the knees. Four types of treatment employed in the physical therapy department were compared—short-wave diathermy, infra-red radiation, faradism to the quadriceps, and paraffin-wax baths for those with hand involvement. The authors observed some improvement after treatment in each of the diagnostic categories as compared with status before treatment, but they agreed that improvement occurred more commonly in the first treatment used, whatever that consisted of. If there were differences in results obtained from the four types of treatment, they were too small in relation to the variability of the group to be distinguished from those due to chance variability. All patients were on a basic regime of exercises, analgesics, splintage, and encouragement, so it seemed possible that any general improvement noted could be due to the basic regime. The measures tested may be useful adjuncts to treatment, but the present study did not indicate they were significantly better than dummy treatment.

AUDIOMETRIC TESTS

367. American Academy of Ophthalmology and Otolaryngology

Guide for the evaluation of hearing impairment. *J. Occupational Med.* Mar., 1959. 1:3:167-168.

Adopted by the Committee on Conservation of Hearing, American Academy of Ophthalmology and Otolaryngology, this guide prepared by the Subcommittee on Noise is a statement of principles based on current medical opinion. It recommends an interim method for the measurement and calculation of hearing impairment regardless of the cause or causes of such impairment. It states that hearing impairment should be evaluated in terms of ability to hear everyday speech under everyday conditions; hearing level for speech should be estimated from measurements with a pure tone audiometer. Formulas for calculating degree of loss are given. It also recommends that any method for the evaluation of impairment include an appropriate formula for binaural hearing, based on the hearing levels in each ear tested separately.

The Guide has also been published in the March-April issue of the *Transactions of the American Academy of Ophthalmology and Otolaryngology,* p. 236-238.

For reprints or information concerning the Guide, write to Director of Research, Research Center, Subcommittee on Noise, 111 N. Bonnie Brae St., Los Angeles 26, Calif.

368. Blakely, Robert W. *(745 S.W. Gaines Rd., Portland 1, Ore.)*

Erythroblastosis and perceptive hearing loss; responses of athetoids to tests of cochlear function. *J. Speech and Hear. Res.* Mar., 1959. 2:1:5-15.

The outstanding sequela of kernicterus following erythroblastosis fetalis is athetosis; deafness is also recognized as a common sequela of the condition. A review of the literature concerning the nature of the hearing loss and the site of the auditory lesion yields contradictory suppositions and conclusions. The present investigation was made to determine whether tests of cochlear function (tests of recruitment and dynamic range of hearing) would reveal any abnormal cochlear function in subjects with perceptive type of hearing loss who had a history of erythroblastosis fetalis. Findings strongly indicate that the cochlea was damaged in the series of patients tested (20 hearing-defective erythroblastotics, aged 7 to 23 years). The presence of recruitment and a significantly reduced linear range of hearing was demonstrated in all subjects. Responses to the caloric test were normal in approximately three-fourths of the ears tested. The writer also concludes that severity of hearing loss in erythroblastosis cannot be predicted from the severity of the associated athetosis.

BACKACHE

369. Cohen, A. M. *(4150 N. 61st St., Milwaukee, Wis.)*

The role of exercise in the treatment of postural low back pain. *Wis. Med. J.* Feb., 1959. 58:2:121-126.

Postural abnormality causes 80 to 90 percent of low back pain, the author states; it is well known that reestablishment of normal balance affords relief. By instituting therapeutic exercises normal balance can be achieved. The relationship between defective posture and low back pain is discussed; principles of corrective exercise underlying treatment of low back pain are stated. A series of six exercises useful in strengthening flexor muscles of the lumbar spine and for stretching extensors is described. Application of postural principles in the activities of daily living is stressed if maintenance of improved alignment is to be achieved.

BLIND—SPECIAL EDUCATION

370. Nolan, Carson Y. *(1839 Frankfort Ave., Louisville 6, Ky.)*

The Stanford Achievement Arithmetic Computation Tests; a study of an experimental adaptation for Braille administration, by Carson Y. Nolan and Samuel C. Ashcroft. *Internatl. J. Educ. of the Blind.* Mar., 1959. 8:3:89-92.

Formerly Braille editions of the Stanford Achievement Tests have excluded the Arithmetic Computation subtest because earlier research reported that blind children scored considerably below the sighted in this particular subtest. Recent requests for the inclusion of these tests led to an experimental evaluation of all four levels of the Arithmetic Computation Tests from Form J. Results of the administration of the Braille adaptation to 282 blind children in grades 3, 4, 6, and 8 in nine residential schools for the blind are given. Findings indicate the tests showed sufficient reliability for practical use, but results should be considered tentative pending analysis of further research.

See also 415; 416.

CAMPING

371. Saunders, Rita *(Camp Waterford, Quaker Hill, Conn.)*

A camp for exceptional children, by Rita Saunders and Herbert Schact. *Recreation.* Mar., 1959. 52:3:102-103.

Children with mental, social, or emotional problems can respond to a camping program; the physical operation of camps for such children is basically similar to those operated for normal children. The authors, codirectors of Camp Waterford, describe personnel necessary for the specialized camping program, their qualifications, administrative aspects, types of activities included in the program, and a typical daily routine. Although the program is strictly regimented, program policies are flexible to allow for adaptations to meet individual and group needs. With slow or maladjusted children, order, discipline, and boundaries of behavior must exist for security and happiness.

CAMPING—ADMINISTRATION

372. Community Council of Greater New York

Fee charging in social agency resident camps; a survey of current policies and practices. New York, The Council, 1958. 31 p. tabs. Mimeo.

This study is the fourth of a series conducted by the Community Council of Greater New York on fee charging in the major areas of health and welfare services in New York City. Because of the wide variation in fee policies and practices in resident summer camps operated by voluntary social agencies, a survey was made of agencies operating such camps for children of New York City. Data on 108 camps (representing 73 agencies) are analyzed; of interest are findings that proportionately more of the camps serving handicapped children are free than those

serving normal children. Logically, weekly costs for maintaining the handicapped child at camp are higher than at regular camps. More handicapped children are accepted as free campers in fee-charging camps than those in regular camps serving normal children. Fee charging camps serving the handicapped received proportionately less of their income from fees; only 12 percent comes from this source. Factors influencing policy decisions in the matter of fees are analyzed. The report includes a list of the camps studied, with the name of the sponsoring agency.

Available from The Community Council of Greater New York, 345 E. 45th St., New York 17, N.Y., at $1.25 a copy.

See also 359.

CEREBRAL PALSY

373. British Council for the Welfare of Spastics

Some facts about cerebral palsy. London, The Council, 1959. 20 p.

An up-to-date pamphlet in question-and-answer form, giving general information describing cerebral palsy, what is known in regard to factors causing the condition, preventive measures, prognosis, statistics on incidence in England and Wales, educational needs for cerebral palsied children, provisions for special education, and methods and aims of treatment. Also discussed are available training courses in Great Britain for professional workers in the field, provisions for children with multiple handicaps, employment prospects for the adult cerebral palsied, vocational training available, facilities, and welfare services provided for adults.

Available from British Council for the Welfare of Spastics, 13 Suffolk St., Haymarket, London, S.W. 1, England, at 1s 6d (27¢) a copy.

374. National Spastics Society (Gt. Brit.)

Oxford Study Group on Child Neurology and Cerebral Palsy . . . September 21-27, 1958. *Cerebral Palsy Bul.* Winter, 1958. 4:1-19.

Contents: A report, Mary Capes.—Disturbance of the body image, W. Ritchie Russell.—The development of the body image, Grace E. Woods.—Recognition and treatment of disturbances of the body image, Stella I. Albitreccia.

Dr. Mary Capes describes the organization and content of the subject matter studied by the group. The three papers on body image that are included in this issue represent only one aspect of the wide range of topics discussed.

375. Spastics' Quart. Mar., 1959. 8:1.

Entire issue devoted to papers given at a conference organized by the British Council for the Welfare of Spastics, Nov., 1958.

Contents: The workings of the brain, J. Z. Young.—Some learning difficulties of cerebral palsied children, Norah Gibbs.—A co-ordinated service for the cerebral palsied, E. Ellis.—Potentialities and problems of young adult spastics, E. L. Knight and E. Batchelor.

Papers were given on the anatomy of the nervous system and brain research, perceptual learning difficulties of the cerebral palsied child, the influence of emotional attitudes on the child's learning, special education, a comprehensive service for the management of cerebral palsy in the five northern counties of England, and evaluation of the cerebral palsied person's potential for employment and social adjustment.

CEREBRAL PALSY—DIAGNOSIS

See 368.

CEREBRAL PALSY—EQUIPMENT

376. Holser, Patricia *(5201 Beverly Blvd., Los Angeles 4, Calif.)*

Self-help adaptations for the adult cerebral palsied woman, by Patricia Holser and Bonita Ward Michaelson. *Am. J. Occupational Ther.* Mar.-Apr., 1959. 13:2 (Part I) :64-65, 69.

Because the persistent involuntary motions of athetosis often pose unusual problems, it was thought that information on adapted household devices to aid the athetoid homemaker might be of interest. Devices described are kitchen aids, adapted gadgets for dressing and personal hygiene, and aids for sewing. Also includes suggestions for performing household tasks. Illustrated.

CEREBRAL PALSY—MEDICAL TREATMENT

See 361.

CEREBRAL PALSY—PHYSICAL THERAPY

377. Healy, Alfred *(Physical Education Research Laboratory, Univ. of Iowa, Iowa City, Iowa)*

Two methods of weight-training for children with spastic type of cerebral palsy. *Research Quart.,* Am. Assn. Health, Phys. Educ., and Recreation. Dec., 1958. 29:4:389-395.

A report of a study to compare the strength and range of motion developed by concentric-contraction and static-contraction programs of weight-training for children with spastic type of cerebral palsy. Five children ranging in age from 8 to 16 years participated in the 8-week programs, administered three times weekly. The weight-training programs were applied to separate legs on the same individual; both the static-contraction and concentric-contraction groups exhibited greater strength at the end of the programs, as well as greater range of motion. Differences between gains achieved by the two methods were not statistically significant. Although results of the study may not be attributed solely to the weight-training program, the author believes such children will benefit from programs of either type if they are physically able to participate.

CEREBRAL PALSY—PSYCHOLOGICAL TESTS

See 425.

CEREBRAL PALSY—SPEECH CORRECTION

378. Matthews, Jack *(Speech Clinic, Univ. of Pittsburgh, Pittsburgh, Pa.)*

A suggested instrument for evaluating speech therapy with cerebral palsied adults, by Jack Matthews and Ernest J. Burgi. *J. Clinical Psych.* Apr., 1959. 15:2:143-145.

A report of research exploring the relationship between measures of articulation and measures of intelligibility in cerebral palsied adults (17 to 49 years of age) with speech problems. Articulation measures were found

to correlate highly with measures of word and sentence intelligibility, a finding consistent with previous results in the testing of cleft palate patients and in functional articulation cases. With the exception of the Irwin Index, most of the shorter and more clinically feasible measures of articulation correlate just as highly with intelligibility measures as do the more complicated indexes. The relatively simple procedure described consists of a count of the number of consonant sounds the speaker can correctly produce. It is suggested that periodic counts of articulation skill might be employed as one index of effectiveness of speech therapy with cerebral palsied adults and with clinical groups other than the cerebral palsied.

CHILD WELFARE—INSTITUTIONS

379. U. S. Children's Bureau

Child-caring institutions; their new role in community development of services, by Martin Gula. Washington, D.C., Govt. Print. Off., 1958. 27 p. (*Children's Bur. publ. no. 368-1958*)

A guide for community agencies and institutions engaged in child care, suggesting how communities can identify, study, and serve children and ways in which the institution can improve services in relation to the total community effort. An attempt has been made to identify the major changes affecting families, new and old groups of children requiring care, and the effects of these changes on institutions. Immediate and long-range goals in community planning are discussed. Criteria for evaluating the "good" institution are listed. A useful publication for board members and professional staffs of institutions and for community agencies planning programs.

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 15¢ a copy.

CHILDREN'S HOSPITALS—OCCUPATIONAL THERAPY

380. Rathbun, J. C. *(War Memorial Children's Hosp., London, Ont., Canada)*

The place of occupational therapy in a children's hospital. *Canad. J. Occupational Ther.* Mar., 1959. 26:1:5-9.

Qualifications for the occupational therapist working in a children's hospital are discussed briefly. The problems encountered in this type of work are greater than those found in an adult hospital. Care of the child with cerebral palsy demands attention from both the psychologic and orthopedic viewpoints. Problems involved in all orthopedic care, including treatment for burns and complicated fractures, are mentioned. Two new research and treatment centers in London, Canada, are in the planning stage; their work will be coordinated with that of the War Memorial Children's Hospital.

CHRONIC DISEASE—PERSONNEL

381. Hackley, John A. *(802 Lehmann Bldg., Peoria, Ill.)*

The education of nursing home personnel for rehabilitation; a three year action research project in Illinois. Peoria, Ill., The Author, 1958. 17 p. Mimeo.

Digested in: *Public Health Rep.* Mar., 1959. 74:3:238.

In this report presented at the 1958 Annual Meeting of the American Public Health Association, the Coordinator of the Rehabilitation Education Service, Illinois Public Aid Commission, described a pilot project for nursing home personnel. Training in rehabilitation technics has already been given personnel in 24 nursing homes. Such training of staff personnel has resulted in benefits to approximately 90 percent of the patients. The program was designed to determine rehabilitation needs of patients, possible results from training of personnel and enlisting cooperation of local physicians and agency resources, best type of training in rehabilitation technics and rehabilitation concepts, and materials of value for training.

CLEFT PALATE—MENTAL HYGIENE

382. Alpert, Augusta *(815 Park Ave., New York 21, N.Y.)*

Notes on the effect of a birth defect on the pregenital psychosexual development of a boy. *Am. J. Orthopsychiatry.* Jan., 1959. 29:1:186-191.

Reports observations on the psychosexual development of a young boy (2 years and 9 months of age when admitted to the therapeutic nursery school for treatment). The child was born with a cleft palate successfully treated by surgery at 22 months. He demonstrated a fixation on the oral level that resulted in a peculiarly damaged self-image, a compulsion to repeat injury to the mouth, and a tendency to regress in response to an increase of anxiety induced either by inner conflicts or outer threats. A special educational approach was used in treatment.

CLEFT PALATE—SPEECH CORRECTION

383. Spriestersbach, Duane C. *(Univ. of Iowa, Iowa City, Iowa)*

Nasality in isolated vowels and speech of cleft palate speakers, by Duane C. Spriestersbach and Gene R. Powers. *J. Speech and Hear. Res.* Mar., 1959. 2:1:40-45.

A report of further research to evaluate the relationship between connected speech and isolated vowels on perceived nasality in the speech of persons with cleft palates. Methods and results of the study are discussed. Findings were in close agreement with a similar analysis of the difference between selected vowels, indicating that the high vowels of cleft palate speakers are perceived as more nasal than the low vowels. According to results, severity of nasality in connected speech is related to severity of nasality for each isolated vowel studied. For vowels with fairly comparable tongue height, front vowels appeared more nasal than back vowels.

CLOTHING

384. Rusk, Howard A. *(400 E. 34th St., New York 16, N.Y.)*

Functional fashions for the physically handicapped, by Howard A. Rusk and Eugene J. Taylor. *J. Am. Med. Assn.* Apr. 4, 1959. 169:14:1598-1600.

The growing number of physically handicapped persons and the lack of specifically designed clothing to meet their needs led to a research project at the Institute of Physical Medicine and Rehabilitation, New York City. A collection of clothing under the name of "Functional Fashions for the Physically Handicapped," produced by Clothing Research, Inc., a nonprofit organization, is now being marketed by direct mail selling. Six items now available in-

clude (for women) a coat-dress, suit-dress, slacks, a belt-pocket unit, and a wheel chair cape; for men the only item presently manufactured is slacks. Future plans envision the manufacture of all basic garments for children of all ages, as well as a wide range of garments for men, women, and children. Catalogs of items available can be secured from Clothing Research, Inc., 307 W. 38th St., New York 1, N.Y.

CLUBFOOT—MEDICAL TREATMENT

385. Fried, Amnon *(133 Rothschild Blvd., Tel-Aviv, Israel)*

Recurrent congenital club-foot; the role of the m. tibialis posterior in etiology and treatment. *J. Bone and Joint Surg.* Mar., 1959. 41-A:2:243-252.

Treatment of recurrence of clubfoot is more difficult than the primary treatment, with surgery finally required for correction. Any procedure used for surgical correction should be based on the pathological anatomy of the deformity, Dr. Amnon believes. He points out the main factors responsible for recurrence and describes methods of surgical correction based on the particular pathological condition found in patients treated. The theoretical assumption that the tibialis posterior should be important in the production of clubfoot appeared to be confirmed by findings in each of 56 operations performed. Transfer of the tibialis posterior to the dorsum of the foot, according to known technics, enables the surgeon to increase dorsiflexion power and to weaken inversion power of the foot. Achilles-tendon lengthening and posterior capsulotomy were performed at the same time to overcome equinus deformity. Thirteen patients were followed for at least 4 years; good results were observed in 12. Overcorrection resulted in only one patient.

DANCING

386. Hood, Claudia Chapline *(1314 W. 93rd St., Los Angeles 44, Calif.)*

The challenge of dance therapy. *J. Health, Phys. Educ. and Recreation.* Feb., 1959. 30:2:17-18, 72.

A report of a survey conducted by the Dance Therapy Study Committee of the National Section on Dance, summarizing information gathered from 25 dance therapists currently employed in hospital settings. A brief review of the literature in the field and the courses available for those interested in work of this type is included. Administrators were also questioned on possible opportunities for dance therapists in hospitals and clinics treating the emotionally or physically handicapped. A copy of the 5-page mimeographed report of the Committee is available from the author.

DEAF—SPECIAL EDUCATION

387. Hofsteater, Howard T.

An experiment in preschool education; an autobiographical case study. Washington, D.C., Gallaudet College, 1959. 17 p. *(Bul. no. 3, vol. 8, Feb., 1959)*

Totally deaf since infancy, the author nevertheless managed to acquire practically the same language background that the normal hearing child enjoys before entering school. His parents, both deaf, were teachers who departed from accepted methods of educating the deaf by teaching him manual language from babyhood on. The process used by his parents was the same as that used by parents of hearing children, except that fingerspelling was substituted for hearing and speech. Mr. Hofsteater learned to read at an early age, greatly increasing his knowledge of words and their meaning. The article indicated the importance of reading skill as the major factor in the development of language facility by profoundly deaf persons. At no time has the author communicated through speech or speechreading.

Available from *American Annals of the Deaf,* Gallaudet College, Washington 2, D.C., at 25¢ a copy.

DRIVERS

388. American Medical Association *(535 N. Dearborn St., Chicago 10, Ill.)*

Medical guide for physicians in determining fitness to drive a motor vehicle (prepared by the Committee on Medical Aspects of Automobile Injuries and Deaths. . . .) *J. Am. Med. Assn.* Mar. 14, 1959. 169:11:1195-1207.

Physical, mental, and emotional states or disabilities that are likely to impair driving ability are specifically discussed, as well as problems of temporary incapacities due to the use of medicaments and alcohol. Special emphasis is given those conditions that preclude the driving of commercial or passenger transport vehicles. The sections on orthopedic handicaps and neurological disorders will be of special interest. This guide represents a summary of the pertinent medical data presently available concerning the ability of the individual to operate a motor vehicle safely.

EMPLOYMENT (INDUSTRIAL)—PLACEMENT

389. Gallivan, John N. *(92 Farmington Ave., Hartford, Conn.)*

Realistic medical evaluations; criteria for employment of the physically handicapped. *J. Kan. Med. Soc.* Oct., 1958. 59:10:433-436.

Instead of attaching medical or quasimedical labels to the physically handicapped, the physician should report his evaluation of the handicapped individual in terms of the ability and skills the patient has to offer. The program of evaluation that the author outlines here permits absorption of the physically handicapped into industry through efforts to adapt the worker to the job or the job to the capacities of the worker. This paper was presented at the annual meeting of the President's Committee on Employment of the Physically Handicapped in 1958.

EPILEPSY—MEDICAL TREATMENT

390. Kaye, N. *(Neurological Dept., Gen. Infirmary, Leeds, England)*

Nydrane as an anticonvulsant, by N. Kaye, I. H. Jones, and G. K. Warrier. *Brit. Med. J.* Mar. 7, 1959. 5122: 627-629.

Experiences in the use of nydrane with epileptic patients in the neurological departments of two English hospitals are reported since findings differ in some respects from those previously published in the past few years. Twenty-seven patients with severe epilepsy were treated with nydrane, either alone or in combination with other drugs; most of these patients have responded to some extent to former treatment but continued to have attacks with a frequency of from once monthly to several a day. Al-

though claims for the low toxicity of the drug were supported by the present findings, 67 percent of the group showed no change in status. Only three of the group were considered improved; six patients became worse. These findings suggest that nydrane is less useful clinically than the more established anticonvulsants. In cases where heavy medication is necessary for control, however, nydrane can occasionally be helpful because of its low toxicity.

EXERCISE

391. Mandel, Werner M. *(Metropolitan State Hosp., Norwalk, Conn.)*

A psychological concept of corrective therapy in a brain-damaged patient. *J. Assn. Phys. and Mental Rehab.* Jan.-Feb., 1959. 13:1:5-9, 22.

A report on the use of corrective therapy (prescribed physical exercise) in the treatment of a 73-year-old male patient who had suffered brain damage. It illustrates the reversal of specific organic, perceptual, and motor deficits without concomitant neurological changes. During the seven month period of treatment marked changes were observed in the patient's perception of time and space, in his stance and motion, as well as in his behavior and psychiatric impairment. No change was observed in his neurological deficit or his vision or hearing throughout the experimental period. Corrective therapy treatment was judged responsible for the patient's becoming oriented and continent. Once the patient regained ability to stand upright and move about independently, his self-confidence and self-esteem returned. The program of corrective therapy is described.

HARD OF HEARING—EQUIPMENT

392. Miller, Arthur A. *(612 N. Michigan Ave., Chicago 11, Ill.)*

Psychological factors in adaptation to hearing aids, by Arthur A. Miller (and others). *Am. J. Orthopsychiatry.* Jan., 1959. 29:1:121-129.

Psychological factors related to the problem of adaptation to a hearing aid can be classified under three headings —positive motivating factors, negative motivating factors, and the nature of the ego functions in the particular patient. Cultural, utilitarian, social, and intrapsychic motives can influence both positive and negative reactions. The way in which an individual meets other adaptive problems in his life experience can also reveal useful clues to his possible adaptation to a hearing aid. Four case histories illustrate some psychological problems encountered in patients. Findings have broader implications as regards the ego problem in rehabilitation in relation to other types of bodily defects, the authors believe.

HEART DISEASE—EMPLOYMENT

393. Chicago Heart Association

Cardiacs have ability (digest of proceedings of the Sixth Heart-in-Industry Conference, Nov. 14, 1958). Chicago, The Assn., 1959. 64 p.

Edited by Dr. Leonard Pearson, Rehabilitation Consultant of the Chicago Heart Association, this digest offers a summary of the latest information available on the abilities of persons with cardiovascular problems to engage in productive work. Dr. Oglesby Paul discussed types of heart disease and the magnitude of the problem in industry; Frances B. McLachlan spoke on the role of the industrial nurse in relation to the cardiac worker; Joseph H. Block presented management's view of the worker with heart disease; and Dr. Paul Dudley White, eminent cardiologist, described the effect of strain and trauma on the heart. In addition, two case histories that were discussed by six workshop groups are given, with observations offered in the groups.

Single copies available from Louis De Boer, Chicago Heart Assn., 69 W. Washington St., Chicago, Ill. (Quantity orders billed at cost)

394. Goldwater, Leonard J. *(600 W. 168th St., New York 32, N.Y.)*

Fifteen years of cardiac work classification, by Leonard J. Goldwater and Lewis H. Bronstein. *J. Occupational Med.* Mar., 1959. 1:3:145-149.

In same issue: Severity of myocardial infarction in garment workers, Leo Price, p. 150-154.—The cardiac in industry, Eugene L. Coodley, p. 155-157.—The magnitude of the heart disease problem, Joseph B. Tauber, p. 158-162.—Heart disease and employment (an editorial), p. 178-179.

The Work Classification Unit for cardiacs, established at Bellevue Hospital, New York, in 1941, suspended operations in 1956. It was believed that goals of the demonstration project had been achieved with some measure of success. This report presents a brief analysis of experiences over the 15-year period; patient characteristics (age, sex, race, source of referral, occupation and employment status, presence of heart disease, and type and severity of heart disease) are tabulated on the 952 persons served. It was concluded that a cardiac work classification unit can perform valuable services in assisting cardiacs to find and retain suitable employment. Where there is a good follow-up program, it can provide important information on the effects of employment on the course of heart disease. There is no evidence that employment per se has any adverse effect on course of the disease.

Dr. Price *(275 Seventh Ave., New York 1, N.Y.)* discusses findings from routine periodic electrocardiograms taken in a large number of over-age garment workers; 88 percent of those studied had passed their sixtieth birthday. Myocardial infarction is not always incompatible with continued employment and a reasonable life expectancy, he believes.

Dr. Coodley *(6010 Wilshire Blvd., Los Angeles 30, Calif.)*, reviewing recent studies on the prognosis for cardiacs in industry, suggests that a more optimistic attitude currently prevails. He discusses problems encountered in the rehabilitation of cardiacs, methods of determining job classifications for cardiacs, and factors entering into job selection.

Dr. Tauber *(Jones & Laughlin Steel Corp., Aliquippa, Pa.)* considers the value to industry of accurate information concerning the prevalence and incidence of heart disease. Discussed are various types of studies, their unsuitability for establishing reliable data, and an acceptable method for determining prevalence of heart disease.

The editorial points out present-day barriers to the useful and possibly beneficial employment of persons with heart disease; these are legal and social in nature, rather than scientific. Workmen's compensation benefits and job seniority often are factors restricting the employment of the cardiac worker.

HEART DISEASE—PROGRAMS

395. Morton, William *(222 39th Ave., San Mateo, Calif.)*

Heart disease screening in elementary school children, by William Morton, Margaret E. N. Beaver, and Richard C. Arnold. *J. Am. Med. Assn.* Mar. 14, 1959. 169:11: 1163-1168.

In same issue: Comparison of three methods of screening for pediatric heart disease, by William Morton (and others). p. 1169-1172.

Describes a screening program conducted in Mesa County, Colorado, for the purpose of estimating prevalence rates for congenital and rheumatic heart disease in children between the ages of 6 and 11. Among children identified as requiring further study, a secondary program of examinations was carried out. Prevalence rates of heart disease and innocent murmurs are given; types of disease found, problems encountered, and suggested improvements for a screening program are discussed. The second paper discusses the comparative values of three types of primary mass screening methods used in two communities. Specificity, sensitivity, efficiency, definitions, and performances are compared. From experience with these methods, it has been determined that no screening method is considered infallible.

HEMIPLEGIA

See 452; 455.

HEMIPLEGIA—BIOGRAPHY

See 355.

HEMIPLEGIA—DIAGNOSIS

396. Brennan, J. Brewster *(St. James Hosp., London, England)*

Clinical method of assessing tonus and voluntary movement in hemiplegia. *Brit. Med. J.* Mar. 21, 1959. 5124: 767-768.

Because no complete system of examining muscle groups presenting motor deficit and hypertonus was available, the clinical method described here was devised to study hypertonic musculature in patients with residual hemiplegia. The method has also been found applicable to most other upper motor neuron diseases. Since such factors as temperature, emotion, attitudinal reflexes, and synergy movements can influence tonus and activity in skeletal muscle, the author discusses how these factors can be standardized in order to obtain true comparisons of tonus or active movement. Examination methods are described; the procedure as applied in examination of flexors and extensors of the elbow joint is also included to illustrate how the system works in practice.

HEMIPLEGIA—MEDICAL TREATMENT

397. Lorenze, Edward J. *(Burke Foundation, White Plains, N.Y.)*

Urologic problems in rehabilitation of hemiplegic patients, by Edward J. Lorenze, Howard B. Simon, and Jack L. Linden. *J. Am. Med. Assn.* Mar. 7, 1959. 169: 10:1042-1046.

Records of 254 patients with hemiplegia resulting from cerebrovascular accidents were studied to determine any possible association between urinary incontinence and failure to achieve independent ambulation. The relationship of incontinence to such other factors as mental and emotional status, positive motivation for independence, severity of muscular involvement, and aphasia was also studied. Despite the high incidence of incontinence among hemiplegics who failed to achieve independent ambulation, it is not believed to be a causative factor in itself. Functions of ambulation and urination are both impaired by loss of cortical control; various measures for the control of incontinence are suggested. In most instances, incontinence can be improved to the point that it does not interfere with the rehabilitation treatment program.

HEMIPLEGIA—PSYCHOLOGICAL TESTS

398. Hague, Harriet Ruth *(858 Seward Ave., Apt. 312, Detroit, Mich.)*

An investigation of abstract behavior in patients with cerebral vascular accidents. *Am. J. Occupational Ther.* Mar.-Apr., 1959. 13:2 (Part II) :83-87.

Fifteen patients with a cerebral vascular accident of the nondominant hemisphere resulting in hemiplegia were tested with a standardized psychological test devised to demonstrate impairment in concrete and abstract behavior. The test is particularly sensitive to minimal organic changes. Since patients of this type often show motor performance at a lower level than might be expected in relation to their physical condition, there is a probability of disturbance in abstract behavior that might account for low motor performance. Findings seemed to indicate that the nondominant hemiplegic patients may be expected to show some difficulty with visual-motor tasks involving simple abstract reasoning. Definite or complete failure on visual-motor tasks involving complex abstract reasoning also is evidenced. Visual-motor tasks may have to be planned so that the patient can function on a concrete basis. It is suggested that such patients with an impairment of visual, spatial, or temporal concepts appear unable to generalize in the relearning process.

HOSPITAL SCHOOLS

399. Goodwin, Frances

We try to give the physically handicapped an educational square meal. *J. Arkansas Education.* Feb., 1959. 31:6:10-11, 16.

Describes the educational program provided patients at the Children's Convalescent Center, Jacksonville, Arkansas. Teaching in this setting differs from that in the regular public school; individual instruction is a necessity and problems of emotional adjustment and discipline are rare. Complete diagnostic testing is needed since grade placement must be immediate and accurate.

HOSPITALS—DESIGNS AND PLANS

400. American Hospital Association

Manual of hospital planning procedure. Chicago, The Assn., 1959. 72 p. (M41-59)

Written as an aid to individuals or groups planning the establishment of new hospital facilities or the expansion and modernization of existing facilities, the manual stresses the community's responsibility in determining the needs, desires, and requirements of the hospital if the best pos-

sible results are to be obtained. Organization of the planning team and its effective functioning are discussed. Architectural planning translates the work of the planning committee into the physical structure and its equipment. Chapters are included on budgeting for capital expenses and operating costs; guides are given for equipping and furnishing the completed hospital. Responsibilities of professional and technical members of the planning team are defined. Flexible adaptation of the principles outlined can be made to meet local situations.

Available from American Hospital Association, 840 N. Lake Shore Drive, Chicago 11, Ill., at $1.50 a copy.

HYDROCEPHALUS

401. Mitchell, Mildred B. *(1726 Kensington Dr., Dayton 6, Ohio)*

Mental development of a hydrocephalic, by Mildred B. Mitchell and Zygmunt A. Piotrowski. *Training School Bul.* Feb., 1959. 55:4:71-72.

A report of an unusual case follow-up of a boy, now 16 years of age, who suffered a birth injury diagnosed as congenital hydrocephalus. At 16 months his condition was diagnosed as a spontaneously arrested hydrocephalus. Results of a series of seven tests administered at various times between age 1 year, 4 months, and 16 years, 3 months, indicate the amazing improvement made on intelligence tests. School achievement has been as unexpected as his intellectual development. Findings in this case suggest that, if even one such child can show such decided improvement, the predictions for other hydrocephalics should be considered carefully.

MENTAL DEFECTIVES

402. Luria, A. R. *(Moscow Univ., Moscow, U.S.S.R.)*

Dynamic approach to the mental development of the abnormal child. *J. Mental Deficiency Res.* Dec., 1958. 2:2:37-52.

Describes the work of Soviet research physicians and psychologists that has helped to clarify the nature of anomalous development and its neurophysiological mechanisms. It is their belief that relatively insignificant defects can cause considerable changes in the entire mental development. The effect produced by an early disturbance of a certain function depends primarily, they believe, on the role played by this function in the general mental development of the child, as well as on the period of development during which the given disturbance occurred. Such scientific diagnosis of the basic or primary disorder and the systemic consequences that it entails leads to a more practical approach to therapy planned to compensate for the particular defect and its consequences. Some illustrations of special methods employed in treatment and of the obtained results are included.

MENTAL DEFECTIVES—DIRECTORIES

403. U. S. Children's Bureau

Clinical programs for mentally retarded children; a listing, compiled by Rudolf P. Hormuth. Washington, D.C., The Bureau, 1958. 22 p. Mimeo.

Originally compiled for the benefit of personnel working in special clinical programs for the mentally retarded who might wish to exchange information on administrative procedures, this directory has now been made available to parent groups and professional workers who need to be aware of community facilities existing throughout the United States. The state-by-state arrangement of listing adds to the directory's usefulness. Information on each facility includes name and address of clinic or center, area served, name of director, ages accepted for service, and name of sponsoring agency.

Available from U.S. Children's Bureau, Washington 25, D.C.

MENTAL DEFECTIVES—MEDICAL TREATMENT

404. Butterworth, Thomas *(411 Walnut St., Reading, Pa.)*

Self-biting among feeble-minded persons, by Thomas Butterworth and John R. Bower. *Pa. Med. J.* Feb., 1959. 62:2:201-204.

Observations of patients at the Pennhurst State School for the feeble-minded revealed that approximately 2 percent indulged in the practice of self-biting; the habit is rarely noted among normal individuals. This paper deals with the effects of prolonged self-biting of the integument of the fingers, hands, and forearms. Hypertrophy, scaly pigmentation, and hypertrichosis at the site of the repeated trauma are the result. The changes produced are distinctive, fixed, and persist indefinitely. The psychiatric factors involved are discussed in some detail.

405. Koch, Richard *(4614 Sunset Blvd., Los Angeles 27, Calif.)*

Attitude study of parents with mentally retarded children: I. Evaluation of parental satisfaction with the medical care of a retarded child, by Richard Koch (and others). *Pediatrics.* Mar., 1959. 23:3:582-584.

Data obtained from 105 families of mentally retarded children less than one year of age revealed that only 52 percent of these families were satisfied with the previous medical care of the child. Subjects of the study were those accepted by the Clinic for the Study of Mental Retardation at the Los Angeles Children's Hospital. Parental attitudes toward the pediatrician and the general practitioner were compared; slightly more were satisfied with the care received from general practitioners but the difference was not significant. Criticisms voiced against both the pediatrician and the general practitioner suggested bluntness of manner, lack of thoroughness in the examination, failure to reveal the true nature of the child's condition, and hesitancy in diagnosis as the basis for complaint. All criticism was related to what and how parents were told concerning the child. Implications of the findings for future curriculum planning in medical schools are discussed.

MENTAL DEFECTIVES—PARENT EDUCATION

See 405; 422; 426.

MENTAL DEFECTIVES—PREVENTION

406. Brimblecombe, F. S. W.

Dietary treatment of an infant with phenylketonuria, by F. S. W. Brimblecombe, Margaret E. R. Stoneman, and R. Maliphant. *Lancet.* Mar. 21, 1959. 7073:609-611.

Because the intelligence of most infants with phenylketonuria deteriorates rapidly in the first few months of life, it is vital that treatment be started early if the rate of mental development is to be enhanced. All available

evidence suggests that the value of dietary treatment lies more in the prevention of intellectual deterioration than in the correction of established mental deficiency, although some slight and often worthwhile improvement in intelligence may be expected. A case history of an infant in whom minor intellectual deterioration had apparently started when treatment was begun is reported. Normal intelligence was apparently regained and maintained on a diet in which both phenylalanine and tryptophan were restricted to approximately 25 mg. per kilogram of body weight daily. It is recommended that all infants should have their urine tested for phenylketones at the age of 3 weeks and possibly again at 6 weeks.

MENTAL DEFECTIVES— PSYCHOLOGICAL TESTS

407. Jenkin, Noel *(Univ. of Sydney, Sydney, Australia)*

Perception in organic mental defectives; an exploratory study: I. The size-weight illusion; II. The Muller-Lyer illusion, by Noel Jenkin and Noel Ireland West. *Training School Bul.* May, 1958 & Feb., 1959. 55:1 & 4. 2 pts.

Part I of this study (annotated in *Rehab. Lit.*, July, 1958, #773) outlined objectives, discussed methodology relating to the general area involved, and presented some experimental evidence suggesting that diminished susceptibility to the size-weight illusion is due to brain damage rather than to intellectual deficit. Part II deals specifically with responses of mentally retarded brain-damaged persons and normal persons to the Muller-Lyer illusion. Cases classified as brain-damaged were, on the average, somewhat less responsive to the illusion than normal persons. The brain-damaged group differed substantially from the normal group in the degree of difference between "inwards" judgments and "outwards" judgments. This finding was interpreted as indicating a general insensitivity of discrimination, probably not specific to the Muller-Lyer illusion. Data are discussed in relation to two different theories, each of which attempts to account for anomalous perceptual behavior in the brain-damaged.

408. Kralovich, Anne Marie *(North Jersey Training School, Totowa, N.J.)*

A study of performance differences on the Cattell Infant Intelligence Scale between matched groups of organic and mongoloid subjects. *J. Clinical Psych.* Apr., 1959. 15:2:198-199.

Although no significant differences were obtained in MA and IQ between two groups of children with a medical diagnosis of brain damage and mongolism, subtests of the Scale showed highly significant differences in the area of motor manipulations requiring simultaneous adductive and abductive hand movements. The organic group did not appear to have been able to achieve this motor development and exploratory interest to the extent of the mongoloid group. It also is suggested that the organic group are not as facile as mongoloids with motor items requiring grasping and manipulation of objects. Differences were most significant between the mental age development of 5 to 10 months. Subjects of the study were children between the ages of 5 and 8 years. Findings suggest the possibility of devising a comprehensive motor performance scale that might discriminate organic children, under one year of age, who present problems of differential diagnosis.

MENTAL DEFECTIVES— STUDY UNITS AND COURSES

409. Saskatoon Association for Retarded Children

Proceedings of the Workshop on Mental Retardation . . . Saskatoon, February 6 and 7, 1957. Saskatoon, Canada, The Assn., n.d. 45 p. Mimeo.

Faced with problems arising during the planning stage for a new and enlarged school for the retarded in Saskatoon, the Association called a conference of representatives of government departments, professional persons working in the interest of the mentally retarded, and members of the Association. This report of the discussions by participants covers definitions and terminology used in the Workshop, social and economic problems of families with retarded children, emotional reactions of parents, education of the retarded of all degrees, parent education, the role of governmental departments (health and education) in the problem, and the role of the Provincial training school. Research, employment aspects, and the responsibilities of community organizations and volunteers were also discussed.

Available from Mrs. J. B. Ellingham, 2521 Broadway, Saskatoon, Sask., Canada, at $1.00 a copy.

MENTAL DISEASE

410. J. Chronic Diseases. Mar., 1959. 9:3.

Entire issue devoted to: Symposium on psychiatric disorders; Lawrence C. Kolb, Special Ed.

Contents: Introduction, Lawrence C. Kolb.—The prevention of mental disorders, Ernest M. Gruenberg.—Anxiety and the anxiety states, Lawrence C. Kolb.—Psychoneuroses and their management in general practice, C. Knight Aldrich.—Depression, brain damage, and chronic illness of the aged; psychiatric diagnosis and treatment, Alvin I. Goldfarb.—The depressive illnesses; their diagnosis and treatment, Jacques S. Gottlieb and Garfield Tourney.—Ambulatory schizophrenia, Marc C. Hollender. —Delirium, a syndrome of cerebral insufficiency, George L. Engel and John Romano.—The use of modern pharmacologic agents in psychiatric disorders, Sidney Malitz.—The challenge of the partial cure, Lawrence S. Kubie.—The psychosomatic concept; use and abuse, Eugene Meyer. —Management and treatment of drug addiction, Kenneth W. Chapman.

MENTAL HYGIENE

411. Fineman, Abraham D. *(353 Commonwealth Ave., Boston 15, Mass.)*

Preliminary observations on ego development in children with congenital defects of the genito-urinary system. *Am. J. Orthopsychiatry.* Jan., 1959. 29:1:110-120.

Subjects of the study were 10 persons (8 male, 2 female) with exstrophy of the bladder, a congenital defect of the urinary excretory apparatus in which the bladder is situated external to the body wall and is turned inside out. Surgical corrective procedures are begun sometime between the ages of four and six years. This paper reports on some of the factors bearing on the degree of personality development. Attitudes of mothers toward the child's deformity, the ability of the child to adapt to the deformity, personality characteristics of adult patients in the series, and the defense mechanisms adopted in some cases were studied. Psychotherapeutic management of these

patients is discussed. Dr. Soll Goodman, Clinical Director of the Westchester Center for Child Guidance, Larchmont, N.Y., contributed a discussion of the paper.

MONGOLISM

412. Carter, C. O. *(Hosp. for Sick Children, London, England)*

A life-table for mongols with the causes of death. *J. Mental Deficiency Res.* Dec., 1958. 2:2:64-74.

Presents a life-table prepared for nearly 700 mongol children attending the Hospital for Sick Children, London, between 1944 and 1955. The table indicates that of live-born mongols 30 percent are dead by the age of one month, 53 percent by one year, and 60 percent by the age of 10 years, findings that are in agreement with statistics on a series of children from Birmingham, England, born between 1942 and 1952. A comparison of mortality for those seen at the Hospital from 1944 to 1948 and from 1949 to 1955 suggests that mortality has decreased by 40 percent in the later period. Causes of death in the present series are analyzed revealing major causes as bronchopneumonia and congenital heart disease. The association of mongolism and leukemia in childhood is confirmed; an association between mongolism and Hirschsprung's disease is also noted. Other malformations found in association with mongolism are listed in the table on causes of death.

MUSCLES—TESTS

413. Williams, Marian *(Stanford Univ., Palo Alto, Calif.)*

Strength variation through the range of joint motion, by Marian Williams and Leon Stutzman. *Phys. Therapy Rev.* Mar., 1959. 39:3:145-152.

A report of experimental studies of forces produced by maximum voluntary isometric muscle contraction; tests were made on the larger joints of the limbs at intervals through the range of motion. Objectives were to develop adequate testing technics, to determine the actual magnitude of muscle forces as measured by isometric methods, and to investigate how these forces vary in different parts of the range of motion. Such analysis of muscle force values can aid in the solution of common clinical problems. Testing technics are described and findings interpreted. Further research in this area is suggested; extensive fundamental data of this nature could result in more precision in clinical evaluation of disability in cases where this type of measurement is appropriate, the authors believe.

NEPHROSIS

414. Riley, Conrad M. *(3975 Broadway, New York 32, N.Y.)*

Current management of nephrosis; statistical evaluation and a proposed approach to therapy, by Conrad M. Riley and Peter R. Scaglione. *Pediatrics.* Mar., 1959. 23:3: 561-569.

Data from a recent evaluation of pooled statistics reveal a significantly improved survival of children with nephrosis under modern management. The risks involved in steroid therapy seem justifiable even though the evidence that such improvement is due to more intensive use of adrenal-active steroid therapy is circumstantial. The authors present a program for steroid administration that has appeared to be satisfactory. Various adaptations are suggested in cases where failure of treatment occurs or in cases where early success is followed some months later by failure. The program as outlined has been the general approach to therapy followed at Babies Hospital, New York City. Suggestions on general supportive measures are given briefly as regards diet, physical activity, and avoidance of infection.

NURSERY SCHOOLS

415. Hoffman, Barbara Ann *(Center for Blind Children, Houston, Tex.)*

Observations and work with preschool blind children. *Internatl. J. Educ. of the Blind.* Mar., 1959. 8:3:93-97.

Describes the preschool program at the Center for Blind Children, Houston, its parent counseling services, and methods for determining readiness of preschool blind children for nursery school experience. Typical reactions of children to the nursery school situation are described. It is stressed, however, that the disturbances observed in these children are not peculiar to the blind, but are characteristics of manifestations in emotionally disturbed children in general. Many factors other than blindness precipitate a breakdown of communication between parents and child in the early years.

416. Jussawala, K. N. K. *(Victoria Memorial School for the Blind, Bombay, India)*

The pre-school blind child. *Indian J. Soc. Work.* Sept., 1958. 19:2:119-125.

Rehabilitation of preschool blind children in India has received very little attention; the author suggests ways in which the problem could be approached, citing methods used in Great Britain, the United States, and Denmark. Also outlined are recommendations for initiating a program for the preschool blind in India and the selection of personnel qualified to work with these children.

NURSING

417. National Tuberculosis Association *(1790 Broadway, New York 19, N.Y.)*

The nurse in rehabilitation. *Rehab. Events,* Natl. Tuberculosis Assn. Mar., 1959. 5:1:(1-4).

The entire issue of *Rehabilitation Events* is given over to a consideration of the professional nurse's responsibilities as a member of the rehabilitation team. Services and programs in tuberculosis hospitals, a rehabilitation center, and in the public health agency are illustrated by examples of each. The article should aid the nurse in identifying and assuming her role as a member of the rehabilitation team.

418. Treacy, Jeanne M. *(Walter Reed Army Hosp., Washington, D.C.)*

Nurses in general hospitals can contribute to rehabilitation. *Military Med.* Mar., 1959. 124:3:224-227.

Rehabilitation concepts currently are based on the theory that rehabilitation starts with the admission of the patient to the hospital; complete utilization of all the social and medical resources in the community and in the hospital is necessary. The success of the team approach depends upon the functioning of the professional nurse as a team member; her responsibilities in this capacity are defined. A case report is included to illustrate how the nurse can aid the

patient and his family during the patient's rehabilitation. Planning of hospital facilities for the future to allow for rehabilitation services is discussed.

See also 351.

NUTRITION

See 406.

OLD AGE—EMPLOYMENT—GREAT BRITAIN

419. Clark, F. Le Gros

Ageing on the factory floor; the production of domestic furniture; an inquiry made through work records and work descriptions into the prospects of ageing men within a mechanized industry. London, The Nuffield Foundation, 1957. 35 p. tabs. *(Studies of ageing within the conditions of modern industry)*

The records of 251 older men employed in manual work producing furniture in modern mechanized factories were studied in detail; both the currently employed and those recently retired were included. Analysis of the records indicated that some adjustments or concessions had to be made for about 3 in 10 of those in the early 60's, and for practically all of those still working in their 70's. Among the men in their late 50's, about 1 in 10 had probably been transferred to less exacting work. Changes and concessions granted were partly due to chronic ill health or senescence. Conditions of the furniture industry still demand skilled hand craftsmen; this fact has enabled older employees to remain at work. The problem facing the industry will arise when those now in middle age who have been trained only for machine and assembly work reach old age. Also discussed briefly are the possible opportunities open for older men in industry to transfer from production to repair work; ability to do so will depend upon their adaptability and some proficiency with hand tools. The complex problems of employment of the aged worker will have to be solved by the employer in cooperation with trade unions. A digest of the report appears in *Rehabilitation* (Journal of the British Council for Rehabilitation), Jan.-Mar., 1959, p. 19, 34.

Available from The Nuffield Foundation, Nuffield Lodge, Regent's Park, London, N.W. 1, England.

OLD AGE—STUDY UNITS AND COURSES

420. Harlan, William H. *(Ohio Univ., Athens, Ohio)*

The training of the professional educator in social gerontology. *Adult Education.* Winter, 1959. 9:2:67-74.

In this address presented at the annual conference of the Adult Education Association, Section on Aging, in 1958, the author discusses objectives of professional training programs provided for persons preparing to teach social gerontology in colleges, universities, and adult education programs. Mention is made also of the facilities and support currently available for training teachers and the real need for trained persons in this field. Social gerontology is defined as the study of the psychological and social status, behavior, and characteristics of the aging person. In addition to acquiring formal knowledge on a wide variety of aspects of gerontology, the professional gerontologist needs orientation toward the persons he will be teaching. Attitude training should be seriously considered in planning training programs and in selecting teachers in this field.

OSTEOCHONDRITIS

421. Stamp, Warren G. *(600 S. Kingshighway Blvd., St. Louis 10, Mo.)*

Late results in osteochondrosis of capital epiphysis of femur (Legg-Calvé-Perthes disease), by Warren G. Stamp, Gregorio Canales, and Richard T. Odell. *J. Am. Med. Assn.* Mar. 28, 1959. 169: 13: 1443-1446.

An evaluation of the bed rest and traction regimen in the treatment of Legg-Calvé-Perthes disease. Follow-up of patients treated at the St. Louis Unit of the Shriners Hospital for Crippled Children and reported by Pedersen and McCarroll (see *Rehab. Lit.*, Oct., 1951, #824) revealed that results classified as satisfactory or fair were highest in the group treated by this method. An evaluation of results in 138 patients seen between 1926 and 1957 was also attempted. Because of the difficulty of evaluating results, comparison of the effectiveness of various methods of treatment was uncertain. The authors' observations confirmed their belief, however, that bed rest and traction will insure the best results. Therapy with crutch and sling can be used in cases of unilateral disease if the patient can be instructed in the importance of nonweight-bearing methods. The main advantage of the traction treatment is that it assures the patient's cooperation.

PARENT EDUCATION

422. Waskowitz, Charlotte H. *(Harriet Lane Home, Johns Hopkins Hosp., Baltimore 5, Md.)*

The parents of retarded children speak for themselves. *J. Pediatrics.* Mar., 1959. 54:3:319-329.

A constant source of difficulty in the field of mental retardation is the lack of communication or misunderstanding that arises between parents of mentally retarded children and professional personnel. This is a report of an exploratory study of parents' dissatisfactions with professional diagnosis, information received, or professional attitudes. Questions were asked regarding the time when parents first suspected retardation in the child, the professional person first consulted, and the person who informed them of the diagnosis. The manner in which parents were informed was variously described. Two full case records are included to illustrate the impact of the total frustrations of seeking help and the continuing care of the child. Parents' attitudes toward the problem of institutionalization of the child were revealing.

PHYSICAL EDUCATION

423. Hooley, Agnes M. *(Bowling Green State Univ., Bowling Green, Ohio)*

We can serve the students with disabilities. *J. Health, Phys. Educ., and Recreation.* Mar., 1959. 30:3:45-46, 62.

Dr. Hooley is in charge of the corrective program in physical education at Bowling Green State College where, three years ago, counseling services for the handicapped were increased. Through the cooperation of all university personnel—the physician, administrator, instructor, and counselor—students are drawn into some activity of the physical education department. Only a small group of students for whom all types of activity are contraindicated are excused from physical education. Procedures of the program are outlined.

See also 391.

PHYSICAL EDUCATION—PERSONNEL

424. Somerville, J. G.

The role of the remedial gymnast. *Rehabilitation.* Jan.-Mar., 1959. 28:23-25.

In same issue: The training of remedial gymnasts, John C. Colson. p. 26-27.

Describes the work of the remedial gymnast and the various types of facilities where his services are employed. This article is based on the author's experiences in hospitals and medical rehabilitation centers, both in the Armed Forces and civilian life. He makes a distinction between remedial "classes" and "groups." Group therapy is often superior to individual therapy due to the therapeutic atmosphere generated by the group. Technics used in the direct, indirect, and oblique approach to treatment are mentioned briefly.

Mr. Colson *(Pinderfields General Hosp., Wakefield, England)* defines the work of the remedial gymnast, the opportunities open for training and employment in England, the basic curriculum, assistance available for training, educational requirements, and salary scale for qualified remedial gymnasts.

PHYSICAL EFFICIENCY

425. Drussell, Ruth D. *(62 W. 30th St., Apt. 6, Los Angeles 7, Calif.)*

Relationship of Minnesota Rate of Manipulation Test with the industrial work performance of the adult cerebral palsied. *Am. J. Occupational Ther.* Mar.-Apr., 1959. 13:2 (Part II): 93-96, 105.

A description of the prevocational testing, evaluation, and workshop training program conducted in the United Cerebral Palsy Center of Los Angeles County. Research reported here was undertaken to determine possible correlation between results of performance on the Minnesota Rate of Manipulation Test and industrial work performance ratings. Manual dexterity testing is most useful in evaluating those who will be able to profit from training and secure independent employment after training. On-the-job performance of the trainees in the program was measured by the U.S. Employment Service Descriptive Rating Scale. Procedures and findings of the study are discussed in detail. Thirty-two cerebral palsied adults, ranging in age from 20 to 40 and with physical involvement ranging from mild to moderate (four also had severe involvement of the lower extremities), were subjects of the study.

PHYSICAL EXAMINATION

See 394; 396; 413; 453.

PHYSICAL THERAPY

See 357.

POLIOMYELITIS

See 436; 449.

POLIOMYELITIS—BIOGRAPHY

See 354.

PREGNANCY

See 357.

PSYCHOLOGY

426. Farber, Bernard

Effects of a severely mentally retarded child on family integration. Lafayette, Ind., Soc. for Research in Child Development, 1959. 112 p. tabs. *(Monographs of the Society for Research in Child Development. Serial no. 71, 1959. 24:2)*

The third of a series of monographs from the Institute for Research on Exceptional Children, University of Illinois, this report is the first in an intensive research program to study the effects of a retarded child on family integration. Dr. Farber, a research sociologist whose specialty is the study of the family, analyzed data gathered through interviews with 240 families. Findings are concerned with the marital relationship of the parents and factors affecting it, effect of a retarded child on the integration of his siblings in the family, and the effect of institutionalization versus home care of the retarded child. Independent variables having an effect on family integration are age and sex of the retarded child, sex of the normal siblings, social status, mother's view of dependence of the retarded child, and supportive and nonsupportive community relations. Implications of the study for professional counseling of parents of retarded children are valuable since few studies have been conducted on the effects of children on parents, especially so because of the traumatic nature of severe mental retardation within the family. The literature is reviewed, procedures of the study described in some detail, and findings discussed. Interview forms, methods of procuring the sample of families, and indexes used in rating data are given in the appendix.

Available from Child Development Publications, Purdue University, Lafayette, Indiana, at $3.00 a copy.

427. Fisher, Saul H. *(400 E. 34th St., New York 16, N.Y.)*

Mechanism of denial in physical disabilities. *A.M.A. Arch. Neurol. & Psychiatry.* Dec., 1958. 80:782-784.

Dr. Fisher presents three case histories illustrating denial of physical disability that are not representative of those usually described in the literature. None of the patients showed confabulation, spatial or temporal disorientation, or explicit verbal denial. Two of the patients had not suffered any brain damage; both clinical examination and psychological testing failed to reveal any trace of such damage. Only minimal evidence of organic brain damage was present in the third patient, who showed none of the extreme manifestations of organic brain syndrome. The denial mechanism broke through via the visual apparatus, resulting in depression in all three. All responded satisfactorily to psychotherapy and succeeded in rehabilitation goals.

PUBLIC ASSISTANCE—LOUISIANA

428. Hailey, Elizabeth *(La. State Dept. of Public Welfare, Baton Rouge, La.)*

Financial aid for low income families with children having special medical needs, by Elizabeth Hailey and J. D. Martin. *J. La. State Med. Soc.* Mar., 1959. 111:3: 98-103.

Under the Louisiana State Department of Public Welfare's program of general assistance to ill or handicapped children whose medical care needs exceed the family's or

community's ability to provide such care, money payments may be allowed to cover costs of the needed physician's services, medicines, appliances, prosthesis, special diet, and transportation to a treatment center. Administration of the program is described; several case histories illustrate how the program operates.

RECREATION

429. Shoemaker, Rowena M. *(Play Schools Assn., 41 W. 57th St., New York 19, N.Y.)*

The disappearing playroom, by Rowena M. Shoemaker and Eunice E. Bigelow. *Nursing Outlook.* Mar., 1959. 7:3:156-158.

Describes a play project planned for the outpatient clinic of Lenox Hill Hospital, New York, and conducted by volunteer workers. Because space was at a premium in the hospital and no room could be set aside for use as a playroom, a movable toy cart was designed with the aid of the Play Schools Association. The play program has been judged successful, resulting in better outpatient care. Standards for the selection of toys and a description of toys purchased are given. The traveling toy cart is now available commercially for those interested in planning similar programs.

REHABILITATION

430. Armstrong, Keith S. *(Suite 115, 31 Alexander St., Toronto 5, Canada)*

What constitutes rehabilitation? *Rehabilitation.* Jan.-Mar., 1959. 28:5-9.

The philosophy of rehabilitation involves certain principles that must govern the rehabilitation process; the individual must be treated as a total person; his worth as a personality must be recognized; his right to services enabling him to attain his maximum potential must be respected; and finally, the community must accept responsibility for providing such services. Mr. Armstrong outlines steps in the rehabilitation process that follow a logical sequence beginning with case-finding, treatment of the disability, and, finally, restoration of function where possible and attention to educational, social, emotional, and economic needs.

431. Bul., Fédération Internatl. des Mutilés et Invalides du Travail et des Invalides Civils. Dec., 1958. 2:2, 3 & 4.

Entire issue devoted to the proceedings of the Third International Conference . . . Lausanne, May 8-9, 1958.

Contents: Les travaux et les résolutions.—Problèmes modernes de l'invalidité, F. Antoniotti.—Die Arbeit, ihre Opfer und deren Wiedergutmachung, M. Fink.—Varum invalidensport? R. Muenchinger.—La rééducation fonctionnelle des paraplégiques, A. Rossier.—Le placement des invalides, R. Magnani.—La réintegration des traumatisés cranio-cerébraux dans le travail, R. Brun.—Quelques aspects du problème du reclassement professionel des handicapés physique en Suisse Romande, A. Stalder.—L'assistance aux invalides, U. Mazzoncini.

Articles on vocational rehabilitation, employment, and sports for the physically handicapped, functional rehabilitation of the paraplegic, vocational rehabilitation of persons who have suffered head and brain injuries, vocational rehabilitation in French Switzerland, and voluntary organizations working for the handicapped. Résumés in English, French, German, and Italian.

432. Réadaptation. Nov.-Dec., 1958. No. 54-55.

Special issue titled: La prévention des infirmités des déformations; mode de vie des infirmes et anciens malades.

The entire issue is devoted to articles on the prevention and treatment of deformity in congenital dislocation of the hip, congenital abnormalities, cerebral palsy, poliomyelitis, paraplegia, amputation, rheumatoid arthritis, as well as the management of such chronic illnesses as heart disease, diabetes, tuberculosis, mental disease, and alcoholism.

See also 352; p. 131.

REHABILITATION—SOUTH AFRICA

433. Du Toit, G. T. *(Natl. Council for the Care of Cripples in S. Africa, Johannesburg, S. Africa)*

A programme for the care of cripples in South Africa. *S. African Med. J.* Feb. 21, 1959. 33:8:163-165.

Factors hindering the adoption of a comprehensive program for the crippled in South Africa are discussed briefly. Lack of skilled personnel and the low economic status of a large proportion of the population are major deterrents. A statement of current needs for orthopedic centers, regional services, care of the handicapped in remote areas of the country, educational services for children, the training of personnel, provision of sheltered employment opportunities for the non-European population, and facilities for the treatment of paraplegics.

REHABILITATION—TURKEY

434. Gorthy, Willis C. *(400 First Ave., New York 10, N.Y.)*

Rehabilitation in Turkey. *J. Rehab.* Jan.-Feb., 1959. 25:1:16-18, 33-35.

The government of Turkey sponsored a study of the rehabilitation needs of industrial workers insured under a federal program that includes a medical care scheme. Mr. Gorthy was a member of the study team representing the United Nations, the World Health Organization, and the International Labour Office. Recommendations for the establishment of a rehabilitation center for industrial workers were requested. Mr. Gorthy describes the federal benefit program, health facilities in operation, the current status of rehabilitation facilities in Turkey, their approach to the problem, types of training available for professional personnel, the lack of specific professional services, and the employment situation for the handicapped. Statistics on the probable extent of the disabled in the Turkish population are given. The proposed plan for a rehabilitation center to be established in Istanbul is discussed.

REHABILITATION—PERSONNEL

See 381; 417; 418; 420; 424.

REHABILITATION CENTERS

See 358.

REHABILITATION CENTERS—ARIZONA

435. Bishop, William A., Jr. *(1313 N. 2nd St., Phoenix, Ariz.)*

Rehabilitation means referral. *Ariz. Med.* Oct., 1958. 15:10:770-773.

Samuel Gompers Memorial Rehabilitation Center of Phoenix, regarded by federal government health officials as one of the best equipped and best staffed of its kind in the United States, serves patients on an outpatient basis only. Patients continue under the general prescriptive authority of their own physicians while undergoing treatment. Functions of the various programs of therapy (physical, occupational, and speech), of its testing laboratories (psychological, vocational, audiometric), and of its social adjustment services are described. Types of disabilities treated, policies and administration of the center, and referral procedures are mentioned briefly. Success of the program depends, the author believes, on the use made of the center's services by referring physicians in private practice.

RESPIRATION

436. Macrae, James

A simple portable aid to respiration, by James Macrae, R. V. Walley, and H. K. Lucas. *Lancet.* Feb. 28, 1959. 7070:452.

Describes a simple apparatus adapted to provide artificial ventilation for patients whose vital capacity is permanently small. Found to be both reliable and economical, the blower respirator has made it possible for many patients to take trips previously barred to them because of the necessity for bulky equipment as an aid to breathing. Directions for adapting the portable type vacuum cleaner are included, with illustrations.

SCHOOL HYGIENE

437. Neilson, Elizabeth A. *(State Teachers Coll., Lowell, Mass.)*

Analytical study of school health service practices in the United States, by Elizabeth A. Neilson and Leslie W. Irwin. *Research Quart.,* Am. Assn. Health, Phys. Educ., and Recreation. Dec., 1958. 29:4:417-458.

A report of a study analyzing and comparing school health practices in three separate census groupings chosen by random sampling technics. An analysis of optional questions answered revealed differences that existed in school health practices in communities of varying sizes as well as different practices related to varying plans of administration. Data include information on services provided for special education (Table 12). Findings of the study should be useful to communities in evaluating their own school health services. Administrators might also be interested in the reported differences between school health programs administered by education departments and public health departments, or jointly.

438. Wright, George N.

Wanted—more referrals from high school. *J. Rehab.* Jan.-Feb., 1959. 25:1:22-23.

Vocationally handicapped persons should be referred to vocational rehabilitation services before they finish high school if problems in rehabilitation are to be kept to a minimum. Lack of information in public school administrators often is responsible for delay in referral. The writer illustrates the social, emotional, and economic problems caused by delayed referral with the brief history of a cerebral palsied client seen in a vocational rehabilitation agency. He outlines a systematic school referral procedure employing a self-report device to be filled out by students in their last year of high school. Use of the form in several high schools in Indiana has aided in early identification and referral of the vocationally handicapped, approximately 10 percent of high school seniors being identified as potentially eligible for rehabilitation service. *See also* 395; 445; 451.

SCOLIOSIS

439. Goldstein, Louis A. *(15 Prince St., Rochester 7, N.Y.)*

Results in the treatment of scoliosis with turnbuckle plaster cast correction and fusion. *J. Bone and Joint Surg.* Mar., 1959. 41-A:2:321-335.

An analysis of results in 54 patients with scoliosis treated by turnbuckle plaster cast correction and spine fusion. Preoperative correction of the curve and maintenance of the correction, the technic of spine fusion, and incidence of pseudarthrosis were studied. The form of therapy used is described. Pseudarthrosis occurred in seven patients (12.9 percent); where fresh autogenous iliac-bone grafts were used, the incidence of pseudarthrosis was significantly reduced. This type of fusion is sufficiently mature at the end of the first postoperative year to hold correction without further significant loss. A monograph titled "Surgical treatment of scoliosis," by the author of this article, will be published in the near future by Charles C Thomas, Publ.

SHELTERED WORKSHOPS—GREAT BRITAIN

440. King, W. *(St. Loyes College, Exeter, England)*

St. Loyes College for Training and Rehabilitation of the Disabled. *Rehabilitation.* Jan.-Mar., 1959. 28:11-15.

Founded in 1937 by Dame Georgiana Buller as a residential center for the training and rehabilitation of severely disabled adults and young people, the College offers a wide variety of courses to enable trainees to find employment in open industry. With the exception of the blind, persons with all types of disability are accepted for training. The article describes administration of the program and the successful results achieved.

SHELTERED WORKSHOPS—OHIO

441. Izutsu, Satoru *(Highland View Hosp., 3901 Ireland Dr., Cleveland 22, Ohio)*

A sheltered workshop in a hospital setting. *Canad. J. Occupational Ther.* Mar., 1959. 26:1:11-21.

Describes the initial planning of the Highland Shop Research Project at Highland View Hospital, Cleveland, one of the few chronic disease rehabilitation hospitals in the United States. Administration of the program designed to explore the vocational potentials of severely disabled chronically ill patients in a sheltered workshop setting is discussed. Inservice training programs for staff personnel, referral procedures for patients, types of work performed, prevocational testing and evaluation, and the activities of a typical day at the Highland Shop are described.

SHELTERED WORKSHOPS—PERSONNEL

442. Lytle, Howard G. *(Goodwill Industries of Indianapolis, Ind.)*

Professional staff for sheltered workshops. *J. Rehab.* Jan.-Feb., 1959. 25:1:14-15, 24.

Types of professional personnel necessary in the administration of a sheltered workshop, their specific roles and contribution in the workshop setting, and the coordination of efforts of the professional and operational staff members are described. Estimated costs of securing professional services for the workshop are given, with suggestions for possible sources of financing. The author, Executive Director of Goodwill Industries of Indianapolis, has outlined four elements of a good working program for such facilities.

SHOULDER

443. Joslin, G.

Rehabilitation following surgical repair of shoulder dislocation. *Physiotherapy.* Mar., 1959. 45:3:64-67.

A case report of the preoperative and postoperative management of recurrent dislocation of the right shoulder. Mobility exercises and breathing exercises were employed in the period both before and following operation for the development of postural control and strong shoulder muscles. Technics of the operation are described briefly. It is stressed that explanation of preoperative technic and the treatment cannot be too thorough if success in rehabilitation is to be achieved.

444. Nelson, Paul A. *(2020 E. 93rd St., Cleveland 6, Ohio)*

Physical treatment of the painful arm and shoulder. *J. Am. Med. Assn.* Feb. 21, 1959. 169:8:814-817.

In diagnosing cause of pain in the shoulder, it is suggested that pathological conditions be divided into those that do and do not cause limitation of motion in the shoulder. Where feasible, physical therapy is directed toward cause of the pain; treatments should be administered by a qualified therapist and the procedures utilized should be selected after careful analysis of the physical tolerance of the patient. This paper was presented as part of a symposium on "The Diagnosis and Treatment of Pain in the Shoulder and Arm," at the 1958 annual meeting of the American Medical Association.

Other papers included in the symposium and published in this issue of the *Journal* are: Basic concepts about shoulder-arm syndrome, John W. Pender, p. 795-797.—Pain in the shoulder and arm from neurological involvement, Paul C. Bucy and H. R. Oberhill, p. 798-803.—Pain in the shoulder and upper extremity; visceral causes considered by the internist, Edward H. Morgan, p. 804-808.—Shoulder pain, Jesse T. Nicholson and Henry S. Wieder, Jr., p. 809-814.

SPECIAL EDUCATION—GREAT BRITAIN

445. Great Britain. Ministry of Education

The health of the school child; fifty years of the School Health Service; report of the Chief Medical Officer of the . . . for the years 1956 and 1957. London, H. M. Stationery Off., 1958. 220 p. illus., tabs.

This report marks the completion of 50 years' work by the School Health Service in Great Britain. A review of the development of the Service and the provision made for treatment and special education of physically handicapped children for the past half century is included, comparing the current situation with that of earlier times. It also presents a survey of health conditions and services for school children for the year 1956-57, including voluminous data on prevalence of specific defects and diseases, general health conditions, growth and nutrition, changes in special school provision, work of the Child Guidance Service, incidence of food poisoning and childhood accidents, and health education measures.

SPECIAL EDUCATION—INDIANA

446. Indiana Society for Crippled Children and Adults

A survey of special education facilities in Indiana, 1958-1959. Indianapolis, The Society, 1959. (59) p. Mimeo.

The fourth such report to be issued in the past few years, this directory is the combined effort of the Division of Special Education, Indiana State Department of Public Instruction, and the Indiana Society for Crippled Children and Adults. Facilities available for children who have physical, intellectual, or personal-social differences are listed alphabetically by county. Section I gives special public schools and classes, as well as special classes sponsored by private and/or voluntary agencies. Section II describes services available at Indiana's five college or university affiliated speech and hearing clinics. Section III lists psychiatric and/or counseling services that can assist in educational placement of the child. Section IV contains a list of all public school speech and hearing therapists. Facilities are designated as to types of handicaps served. In conclusion, regulations governing the provision of special education in Indiana are given.

Available from Indiana Society for Crippled Children and Adults, Inc., 6055 College Ave., Indianapolis 20, Ind.

SPEECH CORRECTION

447. Inskip, Wilma M. *(Hines V.A. Hosp., Hines, Ill.)*

A coordinated treatment program for the patient with language disability, by Wilma M. Inskip and Grace Burris. *Am. Arch. Rehab. Therapy.* Mar., 1959. 7:1:27-34.

The Educational Therapy Section and the Psychology Service of Hines V.A. Hospital have cooperated in a program designed to offer language retraining to persons with language disability following brain injury. Work of the language therapist is closely coordinated with the total rehabilitation program. Aphasic patients and those with transmissive defects (agnosia, apraxia, or dysarthria) are evaluated by the psychologist before being placed on the treatment program. Details of the therapy program are discussed at length. The program, in effect since 1958, has eradicated both duplication of effort and inconsistencies in the treatment of the individual patient.

448. Johnson, Wendell

Children with speech and hearing impairment; preparing to work with them in schools. Washington, D.C., U.S. Off. of Education, 1959. vi, 32 p. illus., tabs. *(U.S. Off. of Education, Bul. 1959, no. 5)*

A bulletin prepared to acquaint students, school administrators, vocational guidance directors, and counselors with the opportunities for service in the field of speech and hearing therapy. Dr. Johnson defines types of impaired speech and hearing, their prevalence, and their effect on school-age children. Programs for public school children are generally provided by speech correctionists; there is great need for qualified personnel in the field. Resources for professional training are listed as well as sources

of additional information for those interested in basic references on speech and hearing therapy.

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 20¢ a copy.

SPORTS

449. Regester, B. S.

Riding as a treatment for the after-effects of poliomyelitis. *Rehabilitation.* Jan.-Mar., 1959. 28:31-32.

Horseback riding as a treatment for the residual effects of poliomyelitis is gaining recognition in Norway, Great Britain, and Malaya. The author is currently in England attempting to get riding as a form of treatment recognized by the medical authorities. Some suggestions for organizing and conducting classes in riding are included. Experience has proved that this form of recreation, used as treatment, has benefits that are both psychological and physical.

STUTTERING

450. Johnson, Wendell

Toward understanding stuttering. Chicago, Natl. Soc. for Crippled Children and Adults, 1959. 36 p. *(Parent ser. no. 3)*

The third in a series of pamphlets designed for parent education by the National Society for Crippled Children and Adults, it is based substantially on findings of a research program on stuttering conducted at the University of Iowa from 1924 to 1955. (See #356, this issue of *Rehab. Lit.,* for information on the recently published book describing the program and its findings in detail.) The information and counsel given in this booklet will help parents understand more clearly the nature of stuttering and their role in helping the child.

Available from Natl. Society for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago 12, Ill., at 25¢ a copy.

SURGERY (PLASTIC)

See 352.

VISION

451. Austin, Caroline *(Mich. State Dept. of Health, Lansing, Mich.)*

Mass preschool vision screening. *Children.* Mar.-Apr., 1959. 6:2:58-62.

Two county health departments in Michigan, aided by the State Health Department, the Michigan Medical Society's Advisory Committee of Ophthalmologists, local health departments, and volunteers, made plans for mass screening of preschool children for eye difficulties. Competently organized, the projects demonstrated that mass vision screening for three- and four-year old children is practical. Preparation of children for testing can be done in the home by the parents and increases the number of children who can be screened successfully. Administration of the projects is described in detail.

VOCATIONAL GUIDANCE

See 425.

VOCATIONAL GUIDANCE—PERSONNEL

452. Patterson, C. H. *(Coll. of Education, Univ. of Ill., Urbana, Ill.)*

Characteristics of rehabilitation counselor trainees, 1956-1957. Urbana, Ill., The Author, 1958. 16 p. tabs.

A preliminary report of a study of rehabilitation counselor trainees in training programs supported by the U. S. Office of Vocational Rehabilitation. Characteristics of the trainees as revealed in results from tests administered in 19 schools having such training programs are discussed, with tabulated data from five different tests selected as being most promising. To date, statements of desirable characteristics for rehabilitation counselors and counselors in general have been opinions only and it is not known whether these opinions coincide with actual characteristics of persons entering the field of counseling. A review of these opinions and of existing studies appears in Dr. Patterson's book *Counseling the Emotionally Disturbed,* annotated in *Rehab. Lit.,* June, 1958, #717.

453. U. S. Veterans Administration

Counseling handicapped adolescents; for use in counseling young people eligible for training under the War Orphans' Educational Assistance Act; prepared by Charles S. Nicholas... Washington, D.C., Govt. Print. Off., 1958. 44 p. *(VA pamph. 22-2)*

Prepared as an aid to counselors under the Veterans Administration program who are called upon to provide services for adolescents under the War Orphans' Educational Assistance Act (see news item in *Rehab. Lit.,* Jan., 1959, p. 31).

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 20¢ a copy.

WALKING

454. Bilowit, David S. *(V.A. Hosp., East Orange, N.J.)*

A kinesiological foundation for an ambulation program for the hemiplegic patient. *J. Assn. Phys. and Mental Rehab.* Jan.-Feb., 1959. 13:1:10-12.

Based on observations and electromyographic findings in normal ambulation patterns and the hemiplegic gait, a physical rehabilitation program for ambulation training of the hemiplegic patient has been devised. The program is based on sound physiological principles. Ambulation in the hemiplegic should be started only after the patient has been trained in weight-bearing, balance activities and exercises to train the muscles in the desired pattern.

455. Close, J. R. *(2929 Summit St., Oakland 9, Calif.)*

The phasic activity of the muscles of the lower extremity and the effect of tendon transfer, by J. R. Close and F. N. Todd. *J. Bone and Joint Surg.* Mar., 1959. 41-A:2: 189-208, 222, 235.

Describes a simple procedure by which reconstructive tendon transfers in the lower extremity can be better evaluated. The test, calling for a limited amount of equipment (sound motion-picture camera in conjunction with the cathode-ray oscilloscope using internal individual muscle electrodes), is a practical method for recording phasic activity of muscles of the lower extremity. It is noted that phasic transfers in general retain their preoperative phasic activity and also appear to regain their preoperative duration of contraction and electrical in-

tensity. In contrast, many nonphasic transfers retain their preoperative pattern of phasic activity, failing to assume the desired muscle action for which they have been substituted, although certain nonphasic transfers can undergo phasic conversion. Since conservation of all remaining muscle power is of the utmost importance in the paralytic lower extremity, the ability to evaluate what might be expected of the transferred muscle in its new site is valuable in planning surgical procedures.

WORKMEN'S COMPENSATION

456. American Medical Association. Council on Industrial Health

Statement on medical relations in workmen's compensation. *J. Am. Med. Assn.* Jan. 17, 1959. (Special ed.) p. 73-76.

Reprinted from: *J. Am. Med. Assn.* Oct. 29, 1955. 159:9:907-909.

This special issue of the *Journal* is given over to the report of the Commission on Medical Care Plans, its findings, recommendations, and conclusions and is the culmination of three and one-half years' study of various medical care plans throughout the United States. In the section covering industry programs is found a discussion of the medical profession's interest in workmen's compensation. The Council on Industrial Health recognizes that physicians have a duty and responsibility to work for the welfare of the occupationally disabled. Successful operation of a workmen's compensation system depends increasingly upon the medical profession. The essential elements in the implementation of the goals of such programs from the medical point of view are described.

WORKMEN'S COMPENSATION—CALIFORNIA

457. Lane, Morton

The effect of the California workmen's compensation law upon the employment of the handicapped. New York, Institute of Phys. Med. and Rehab., 1958. 45 p. *(Rehab. monograph XVI)*

The third and final survey in a series of studies on the effect of workmen's compensation laws on rehabilitation and reemployment of the physically handicapped, illustrating major compensation problems found in all states. (The two previous surveys concerned workmen's compensation laws in New York and Massachusetts [*Rehab. monographs XI and XIV*]. For annotations of both see *Rehab. Lit.* Mar., 1957, #412 and May, 1958, #568.) Much of the confusion in California arises from the state's disability rating methods; second injury statutes have also created much controversy. The author suggests certain legislative changes and problems needing legislative consideration if sound theory and successful practical operation of workmen's compensation laws are to become compatible.

Available from The Institute of Physical Medicine and Rehabilitation, 400 E. 34th St., New York 16, N.Y., at $1.00 a copy.

WORKMEN'S COMPENSATION—LEGISLATION

458. U. S. Bureau of Labor Standards

State workmen's compensation laws; a comparison of major provisions. Washington, D.C., Govt. Print. Off., 1958. 24 p. maps.

Presents in brief form, by means of maps, the major facts about workmen's compensation laws in each state, with the recommended standards for such legislation. Gives information on compulsory or elective laws, numerical exemptions (small employers not covered), occupational disease coverage, provisions for diseases caused by ionizing radiation, medical benefits for accidental injuries, for occupational diseases, and second injury, maintenance benefits during rehabilitation, types of administration of compensation laws, and ratio of maximum weekly benefits to average weekly wage. Hawaii, Puerto Rico, Alaska, and the District of Columbia are included as "states" in the report.

Copies available from regional offices of the U.S. Department of Labor or from the Bureau of Labor Standards, Washington 25, D.C.

Events and Comments

Two Additional Spanish Editions Published

SPANISH TRANSLATIONS have been prepared by the International Society for the Welfare of Cripples of the booklets, *Management of the Patient with Hemiplegia* (New York State Dept. of Health, 1958) and *Organization of an Occupational Therapy Department* (Council of the World Federation of Occupational Therapists, 1957). Spanish titles are *Tratamiento de pacientes hemipléjicos* and *Organización del departamento terapéutica ocupacional.* The translations are available from the ISWC, 701 First Ave., New York 17, N.Y.

Dr. Hoerner Comments

Employment of Quadriplegics

"THE EMPLOYMENT FIGURE for quadriplegics patients is still very low. Statistics for gainful employment of paraplegics are from 60 to 70 per cent; however, in quadriplegics this percentage drops sharply, averaging approximately 16 per cent.

"Analyzing the activities of the quadriplegic patients who do gainful occupations, their work pursuits are found to be in the fields of general office work, accounting, bookkeeping, sales, insurance, art, light assembly procedures and broadcasting.

"In the analysis of the occupations followed by quadriplegics, two main factors are found. These are the utilization of the voice, and the skillful manipulation of the upper extremities in light-energy work requirements.

"Future employment opportunities for the quadriplegic must be fully and adequately explored and exploited for the successful occupational placement of the quadriplegic in gainful pursuits, taking these two factors into consideration."—*Earl F. Hoerner, M.D., "Rehabilitation of the Amputee, the Hemiplegic, and the Quadriplegic," p. 121, in* Clinical Orthopaedics, No. 12: Rehabilitation. *1958. 327 p. J. B. Lippincott Co., E. Washington Sq., Philadelphia 5, Pa. $7.50.*

Film on "Asthma Conditioning Program" to Be Available

AFTER AUGUST, 1959, a 16-mm. sound motion picture will be available on the reconditioning program for asthmatic children described by Dr. Merle S. Scherr and Lawrence Frankel in the Dec. 13, 1958, issue of the *Journal of the American Medical Association* (see *Rehab. Lit.*, Feb., 1959, #153). Those interested in borrowing this film should contact: Motion Picture Dept., Warner Chilcott Laboratories, 201 Tabor Rd., Morris Plains, N.J.

J. Fenton and F. P. Connor Comment

The Changing Picture of Special Education

"AMONG THE NUMEROUS changes taking place in special education is the emphasis being directed toward helping physically handicapped students adjust to a regular class program, the use of itinerant teachers, and the comprehensive unit in the regular school. Increasingly noted also is the use of an interdisciplinary approach to the education and care of the handicapped. New programs are being initiated for the brain injured and for children with multiple disabilities. . . . Formerly the predominant types of conditions required many afflicted children to undergo long-term treatment and care away from home. A great number of instructional programs were, therefore, carried on in hospitals, sanatoria, and convalescent homes as well as special schools and classes. Advances made in medicine, greater accessibility of medical care, the rehabilitation movement and extensions of school health services, alleviated certain types of disease entities, eliminated others, and markedly reduced the confinement period for most. The numbers of children, however, with birth injury, cerebral palsy, and congenital conditions surviving the rigors of birth have increased. These children now constitute the major portion of the special class population. They present more complex, diverse and unique educational problems which make it necessary for those working with them to acquire new skills in teaching methods and techniques."—*From "The Changing Picture in the Education of Children with Crippling Conditions and Special Health Problems," by Joseph Fenton and Frances P. Connor, in* Exceptional Children, *February, 1959, p. 256.*

New Medical Journal

THE FIRST ISSUE of the *Journal of Occupational Medicine* made its appearance in January, 1959. The *Journal* is the official monthly publication of the Industrial Medical Association, 28 E. Jackson Blvd., Chicago 4, Ill. The March issue includes a symposium on the cardiac in industry and the "Guide for the Evaluation of Hearing Impairment," adopted by the American Academy of Ophthalmology and Otolaryngology (see #394 and #397, this issue of *Rehab. Lit.*). The annual subscription rate is $10.00, single copies $1.00.

New International Film Catalog Now Available

A NEW EDITION has been published of *Films World Wide,* a booklet describing 16-mm. films that may be borrowed from the International Rehabilitation Film Library, International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y.

Speech and Hearing Defects in U.S. School Children Estimated

CONSERVATIVELY ESTIMATED about 4 percent of United States school children have seriously impaired speech or hearing, according to Bulletin 1959, no. 5, U.S. Office of Education (see #448, this issue of *Rehab. Lit.*). The publication, titled *Children with Speech and Hearing Impairment,* goes on to state that, of the total seriously affected, over 1.5 million, scarcely 1 in 5 receives remedial instruction. At least the same number of adults is estimated to have major speech and hearing handicaps, making a national total of 3 million or more. The number is increasing in proportion to the general population increase. Hearing problems with communicative and educational significance of severe grade affect at least 5 of every 1,000 school-age children (not including the deaf). About 30 to 50 of every 1,000 children of school age have hearing losses that may or may not be associated with speech problems but call for medical attention, about half requiring special seating and related classroom adjustments. Retarded speech development characterizes 3 or more of every 1,000 children and persists as a problem requiring speech correction in about 1 of every 2,000 school children. Speech problems associated with cerebral palsy and other types of neuromuscular impairment or brain damage are found in 1 of every 2,000 children of school age.

Changes of Address

AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION, national office. To: 1605 New Hampshire Ave., N.W., Washington 9, D.C.

BENEFIT SHOE FOUNDATION, INC. To: 861 Broad St., Providence, R.I.

KUHNEN THERAPEUTIC EQUIPMENT COMPANY. To: 1029 Orlando Ave., Winter Park, Fla.

ORTHOPEDIC APPLIANCE AND LIMB MANUFACTURERS ASSOCIATION, national office. To: 919 18th St., N.W., Washington 6, D.C.

Handicapped Students Attend the University of Illinois

THE STUDENT REHABILITATION Center at the University of Illinois completed in 1958 its 10th year as the campus coordinating agency for students who have severe physical handicaps. Of the 21 wheelchair students graduated in 1958, 3 received master degrees and 1 a Ph.D. degree. All are now well employed. During the year, 153 students were enrolled at the Center. Of these, 98 were confined to wheelchairs, 67 men and 31 women. All students were Illinois residents except 48 who came from 25 other states.

Classified as to disabilities, the students included 34 with spinal cord injuries, 81 with postpoliomyelitic effects, 13 with cerebral palsy, 3 with muscular dystrophy, 2 with severe arthritis, 3 who were amputees, and 10 who were blind.

Although only 35 to 40 new students could be admitted to the University in September, 1958, well over 450 applications were received from handicapped students from all over the country.

Since 1948, when the University began its special program for handicapped students with 8 war veterans, 125 special students have been graduated. Rapid progress was made, so that the campus and classrooms could be accessible by ramps and elevators. All new buildings on campus are being designed with handicapped students in mind. Two buses with hydraulic lifts circle the campus hourly.

Much of the success of this special program of the University may be credited to Mr. Timothy J. Nugent, Supervisor of the Center. Charles Elmer heads the physical therapy staff at the Center. Dean Trembly, Chief of Counseling, and John Paschal, Chief of Special Services, give particular attention to the special problems of handicapped students.

Alexander Graham Bell Association Appoints Executive Secretary

THE APPOINTMENT of Mrs. Jeanette Ninas Johnson as executive secretary of the Alexander Graham Bell Association for the Deaf was recently announced. Mrs. Johnson joined the Association's headquarters in Washington, D.C., in July, 1957, as editor of the *Volta Review*. She previously was editor of the *Bulletin for Medical Research* and assistant editor of the *Journal of Medical Education*.

IHB Professional Training Program Facilities Enlarged

A REVISION of its professional training program has been announced by the Industrial Home for the Blind. Enlarged facilities are offered to agencies and colleges, thus increasing services in the field of rehabilitation of the blind. The Professional Training Program will offer three programs for blind and seeing persons interested in preparing for service to the blind—(a) Graduate Students in Rehabilitation Counseling, (b) Special Program for Workers in the Field or Persons About to Enter the Field, and (c) In-Service Training. Further information may be obtained by writing to Dr. Herbert Rusalem, Director of Professional Training, Industrial Home for the Blind, 57 Willoughby St., Brooklyn 1, N.Y.

Definitions and Classifications in Chronic Disease Decided Upon

THE SUBCOMMITTEE ON Chronic Diseases of the Comitia Minora of the Medical Society of the County of Kings and Academy of Medicine of Brooklyn, in an organizational meeting last fall surveyed problems in chronic diseases. Because of the different interpretations given terms that are used loosely and are ill-defined, the subcommittee proposed the following definitions and classifications:

"Chronic Diseases—Comprise all those physical, nervous and mental impairments, or deviations from the normal, which are presently not amenable to specific therapy, and therefore presently considered incurable, and which necessitate symptomatic, palliative or rehabilitative treatment.

"This definition delineates chronic diseases from the acute diseases and those chronic conditions which are disabling or crippling, without requiring medical care. The length of time an illness persists is not of itself a differential feature between acute and chronic diseases.

"Geriatrics — Concerns itself with the problems of normal aging and the special aspects of illnesses in the aged. It overlaps with chronic diseases where it is concerned with the special aspects of chronic diseases in the aged.

Places of Care for Chronically Ill Patients

1. Hospitals
   (a) Patients with acute exacerbations or complications require:
      1. General hospitals.
      2. Chronic disease hospitals with intensive treatment centers.
   (b) Patients requiring constant medical supervision and nursing care require:
      1. Chronic disease hospitals.
      2. Infirmaries.
      3. General hospitals with centers for long-term treatment or rehabilitation care, but not constant medical care.
2. Nursing Homes—for patients requiring nursing and rehabilitation care, but not constant medical care.
3. Home Care—for patients requiring nursing and rehabilitation care but who can be cared for in their own homes, with care provided by medical and nursing home care programs.
4. Homesteads, Shelters, Old Age Homes —are institutions for the disabled or infirm people not requiring medical or nursing care."

—*"Abstract of the Minutes of the Comitia Minora" in* Bul., Med. Soc. County of Kings and Acad. Med. of Brooklyn, *February, 1959.*

Vocational Rehabilitation of Older Workers in New York City

TRAINING TO MAKE disabled in their 60's and 70's employable is offered now as a regular program of the Federation Employment and Guidance Service, 30 W. 24th St., New York, N. Y. Testing, counseling, and evaluation supplements training given in a sheltered workshop. Of 97 persons participating in a six-month experimental phase, 31 were evaluated as employable in competitive employment and 23 were placed. Most participants were recommended by the N. Y. State Division of Vocational Rehabilitation, which pays for training during the workshop period. Financial support was also given by the U.S. Office of Vocational Rehabilitation and the Federation of Jewish Philanthropies.

ISWC and CARE Establish Rehabilitation Bookshelf Project

DONALD V. WILSON, Secretary General of the International Society for the Welfare of Cripples, recently announced the establishment of the ISWC-CARE Rehabilitation Bookshelf Project. This is the first time individuals and organizations in the United States have been enabled to furnish urgently needed books dealing with rehabilitation methods and technics to over 50 countries. Each bookshelf is a complete unit of practical up-to-date information for doctors, therapists, and laymen. Bookshelves are available in English ($150 and $75), in Spanish ($25), and in French ($10). With the cooperation of CARE, bookshelves can be purchased, packaged, and distributed at far below cost. The ISWC, by soliciting help from the public, hopes to expedite the establishment of permanent functional libraries in every country in the world. All inquiries and checks should be sent to: Rehabilitation Bookshelf Project, ISWC, 701 First Ave., New York 17, N.Y.

Fewer Injured at Work in 1958

THE LOWEST LEVEL since 1938 in disabling job injuries among American workers was seen in 1958, according to preliminary estimates compiled by the U.S. Bureau of Labor Statistics. The 1958 total is 1,810,000 work injuries. Although the trend in employed labor force has been steadily upward, the volume of injuries has decreased 25 percent from a 1943 high of 2,414,000. Deaths from this cause declined to 13,300, the lowest level recorded in the Bureau's 23-year series. Some permanent physical impairment resulted for 75,700 workers, disablements ranging from partial loss of use of or amputation of a finger or toe to complete inability to engage in gainful employment. In 1958 about 38 million man-days of disability resulted from injuries. With the addition, to this immediate loss, of figures resulting from the evaluation of effects of deaths and permanent impairments, the total will be about 160 million man-days, equivalent to a year's full-time employment of about 515,000 workers.

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